

# **Introducing Anthropological Economics: The quest for an Anthropological basis for Economic theory, growth models and policy development for wealth and human welfare maximization**

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## **Abstract**

This paper attempts to merge the concepts and theoretical frameworks of the disciplines of Anthropology and Economics, and attempts to create a new sub-field in Economics called 'Anthropological Economics' which is mired in Anthropological concepts and principles and seeks to maximize not only human welfare and happiness but also wealth maximization across cultures, while considering both the psychic unity of man, universal human needs and culture-specific factors. Thus, Anthropological Economics is expected to be inter-related to other disciplines of Economics, but remain complementary to them i.e., it is not expected that it will intrude into other sub-fields of economics, replace them, or override their principles in any way. It will therefore draw upon other aspects of economic theory, and enrich them suitably. It is therefore expected that all aspects of Economic theory will be taken into consideration during the process of decision-making and policy formulation, including those of Anthropological economics, and independent, context-specific judgment will always be applied. The new proposed field of Anthropological Economics proposes to take the idea of Human Welfare to its logical conclusion by extending the work already carried out in various sub-disciplines of economics, and integrating it more tightly with various concepts in Anthropology. While many attempts have been made in the past to integrate the fields of Anthropology and Economics, we hope this endeavour will take this exercise to an altogether new level, by creating a new generation of "Anthroeconomists".

## Overview and History of Anthropology

Anthropology is a holistic and an all-encompassing science which studies different aspects of man across space and time, and integrates this study with a study of his forerunners and predecessors such as hominins, hominoids and other primates to achieve a complete understanding of the biological origins and culture of man. It also encompasses the approaches of both the biological and social sciences for a wholesome synthesis between the two. It includes topics as far removed as the evolution of primates into humans (evolutionary anthropology), study of variations among humans, genetics, archaeology, anthropometry, paleoanthropology, ethnography, human ecology, cultural anthropology, economic anthropology, political anthropology, study of human societies, the study of human behaviour, the origin and functions of language and various aspects of applied anthropology. Anthropology therefore deals with all aspects of human existence, and its scope is so vast that it interfaces with many other sciences such as sociology, historiography, psychology, geography, social sciences and even economics. However, the core fields of Anthropology are Physical Anthropology, Cultural Anthropology, Social Anthropology, Archaeological Anthropology and Linguistic Anthropology.<sup>1 2 3</sup>

The word anthropology is derived from the Greek word 'anthropos' which means human being, and 'logos' which means science, and first appeared in the works of German Renaissance writers Magnus Hundt and Otto Cassmann. Anthropology therefore refers to the science of human beings (Barnard, 2000). However, the term anthropology did not exist at that time and the word came into use only in the past couple of centuries, having been derived directly from the French word 'anthropologie'. According to the Bartholins, Anthropology is "the science that treats of man, and is divided ordinarily, and with reason, into anatomy, which considers the body and the parts, and psychology, which speaks of the soul." Paul Broca defined Anthropology much more simply as "The natural history of man". The 1822 Encyclopaedia Britannica defines Anthropology as a discipline devoted to a discourse on human nature. According to Haviland, Prins, Walrath and McBride (2011), "Anthropology is the study of humankind in all times and places". The American Anthropologist Lewis Langness (Langness 1974) considers anthropology to be "The scientific study of human beings- i.e., of the human creature viewed in the abstract: male, female, all colours and shapes, prehistoric, ancient, and modern." The University of North Texas provides the following definition of Anthropology, "Anthropology is the study of human diversity around the world with a view to identify

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<sup>1</sup> Anthropology Carol R. Ember, Melwin Ember, Peter N. Peregrine, 12th Edition, Pearson Education Inc. 2008

<sup>2</sup> Cultural Anthropology Barbara Miller, 6th Edition, PHI Learning Private Limited 2011

<sup>3</sup> Cultural Anthropology: Appreciating Cultural Diversity, Conrad Phillip Kottak, Fifteenth edition, McGraw Hill International Edition

commonalities and differences in social institutions, cultural beliefs and communication systems". According to Barrett (Barrett 1996), "Anthropology usually has been defined as the study of other cultures, employing the technique of participant observation, and collecting qualitative (not quantitative) data". Theodor Waitz in a great six volume work published between 1859 and 1864 referred to it as the science of the nature of man. The American Anthropologist Clyde Kluckhohn compared Anthropology to a great mirror which enabled man to appreciate his own diversity.<sup>4 5</sup>

Anthropology is also very closely related to sociology which is often defined as the "science of society". (L.F Ward and W.G Summer) Sociology developed into a distinct discipline in the nineteenth century, and August Comte, Herbert Spencer, Emile Durkheim, Max Weber, George Herbert Mead, Talcott Parsons and Karl Marx were the pioneers of sociology. However, Ibn Khaldun of Tunis had laid the foundations of the discipline much earlier. Many Anthropologists also functioned as sociologists and the distinction between the two disciplines was often blurred. August Comte defined sociology as "The science of social phenomena subject to natural and invariable laws, the discovery of which is the object of investigation." Max Weber provided the following definition of Sociology, "Sociology was the science which attempted the interpretive understanding of social action in order thereby to arrive at causal explanation of its course and effects." According to Morris Ginsberg, "In the broadest sense, sociology is the study of human interactions and inter-relations, their conditions and consequences." Sociology also forms a part of a much broader field of Social sciences which may be defined as disciplines which study social interaction, society or culture. (William P. Scott)

Anthropology is a relatively new discipline whose theoretical framework was largely developed only in the nineteenth and the twentieth centuries. However, the interest in studying human beings and various aspects of human beings can be traced to the time of Herodotus in Ancient Greece in the fifth century BC, who developed a great interest in alien peoples and may have been the world's first anthropologist. Herodotus travelled widely amongst Greek colonies, but wrote about other alien cultures mostly from second hand sources. Other early contributors to Anthropology included Aristotle, Strabo, Lucretius (progenitor of the Three-age system of classification later refined by Christian Jurgensen Thomsen and Gustav Oscar August Montelius), Tacitus, Aquinas and Polo. Aristotle, arguably the world's first biologist, who introduced philosophical anthropology, wrote on human nature, and differentiated between man and animals. Strabo, a geographer, also wrote about distant places and far off places just

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<sup>4</sup> E. A Hoebel, Man in the Primitive World: An introduction to Anthropology, McGraw Hill, New York, 1958

<sup>5</sup> Cross cultural perspectives in Human development: Theory, research and application Edited by T. S Saraswathi, Sage publications, New Delhi, 2003

like Herodotus. He was known for his travels to Egypt, Ethiopia and parts of Asia Minor. Some aspects of anthropology such as linguistics also evolved independently, in places like Ancient Egypt, Ancient India and Ancient China through the publication of notable works such as those of Panini but were recast and reformulated in recent times. The voyages of early travelers or conquerors such as Hiuen Tsang, Fa Hien, Alexander the Great, Appolonius of Tyana and Megasthenes also stimulated interest in other cultures.<sup>6</sup>

Interest in cultural studies can be traced to the renaissance period of the fourteenth and the fifteenth centuries. In the fourteenth century, Ibn Battuta also wrote about his travels to distant lands which included both Muslim and Non-Muslim worlds. Similarly, the age of exploration gave a boost to interest in exotic cultures, and travellers like Vasco da Gama, Magellan, Amerigo Vespucci, Vasco Nunez de Balboa, James Cook and Christopher Columbus wrote about their encounters with distant cultures and travels to distant lands. The dawn of the Age of Enlightenment, the French Revolution and the Industrial Revolution gave a major boost to anthropology and sociology. The famous French philosopher Baron de Montesquieu described several exotic cultures in his work "The spirit of the Laws" which was published in the year 1748. The British historian Henry Maine's and the American anthropologist Lewis Henri Morgan's famous works "Ancient Law" (1861) and "Ancient Society" (1877) were based on their own investigations and travels. Colonialists and missionaries also wrote about their encounters with other cultures, but their endeavours often had selfish, ulterior motives, and their missions were labeled civilizing missions. Non-European cultures were often labeled primitive, savage, barbaric, pre-literate etc, and not even the most eminent of Anthropologists were free from Eurocentric bias. A manifestation of this kind of bias can be found in unilinear theories of cultural evolution, where western cultures were placed at the apex of advancement, and it was thought that other cultures would follow the path of western cultures. Even though this school was replaced by multilinear evolution (Julian Steward, Leslie A. White, Sahlins and Service), Cultural Diffusion (A L Kroeber, Clark Wissler, Schmidt, WJ Perry, Robert Lowie and Ratzel) and Historical Particularism (Franz Boas), Anthropology was never entirely free from Eurocentric bias. Other cultural evolutionists were James Frazer, WHR Rivers, Carlos Seligman, and AC Haddon. In France and Germany, anthropology took off in the seventeenth and the eighteenth centuries, and other names such as ethnology, Volkskunde, Volkerkunde were often employed to describe Anthropology. Early attempts to establish anthropology as a distinct science can also be traced to the efforts of the Italian philosopher Giambattista Vico, the French philosopher Montesquieu, and French intellectuals Denis Diderot, Jean le Rond d'Alembert, Marquis de Condorcet and Jean-Jacques Rousseau. The German Philosopher Immanuel Kant identified Anthropology as a formal field of study which traced the progress and cultural

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<sup>6</sup> Window on Humanity: A concise introduction to Anthropology, Konrad Phillip Kottak (2004), MacGraw Hill Education

development of mankind in 1798. (Louden, 2006) In English, the word 'anthropology' can be traced to the year 1805 (McGee and Warms, 2012). Anthropology eventually began to adapt to local interests and North American Anthropologists, for example, began to show a great deal of interest in the culture and customs of native North American people, and Australians did likewise, but to a smaller degree. Anthropology has also begun to take off in developing countries, but the field is not entirely free from colonial bias.

Anthropology also owes a great deal to revolutions in the evolutionary sciences. Edward Tyson and Friedrich Blumenbach made many contributions to Biological Anthropology in the sixteenth and the seventeenth centuries through metrical and anatomical studies. Buffon, Turgot, Monboddo and Robertson also wrote about the diversity of man in terms of physical appearance and races, and many Anthropologists of this period proposed classificatory approaches. Charles Darwin's path-breaking work 'On the origin of species' which was first published in 1859, is largely considered to be revolutionary and game-changing, and it played such a key role in the development of Anthropology that some scholars such as Robert R. Marrett (1912) saw Anthropology as a direct result of Charles Darwin's and Herbert Spencer's ideas. Anthropology eventually gained respectability, and departments of Anthropology were established in universities all over the world by pioneers such as Edward B. Taylor, Franz Boas and Paul Broca. Many articles, papers and scholarly works were published in the field of anthropology in leading journals and several sub-disciplines and branches were introduced in Anthropology. Many new theories were developed in various sub-disciplines of Anthropology to provide a conceptual foundation and a theoretical framework in the field. By the early Twentieth century, Anthropology took off due to new methods and techniques, and many journals dedicated to Anthropology were launched. Anthropology became an increasingly complex and stratified field by the 1920's with many contributions made by leading researchers of the day. A plethora of new ideas are being applied in the field of anthropology to make it suitable to the needs of the twenty-first century, and these include concepts such as Action Anthropology, multi-sited ethnography, and critical ethnography, to name a few.

### **Overview and history of Economics**

Economics is one of the oldest fields of study on earth, and is known as the queen of the social sciences. Economic problems have concerned humans since pre-historic times. Robert Heilbroner described economics as a "Worldly Philosophy" because it is concerned with matters of how our material wants are best served with limited resources. Economics is the science that deals with economies, and studies the functioning of economies. It also deals with the production, consumption and transfer of wealth in relation to factors of production such as land, labour, capital and entrepreneurship. It also studies the behavior and functioning of economic agents and actors, and how they function in diverse situations. The science of

economics pervades every aspect of human life, and its applications are wide-ranging and far-reaching. Many definitions have been provided for Economics. For example, John Stuart Mill defines Economics as “The science which traces the laws of such of the phenomena of society as arise from the combined operations of mankind for the production of wealth, in as far as those phenomena are not modified by the pursuit of any other object.” According to Alfred Marshall, “Economics is a study of man in the ordinary business of life. It enquires how he gets his income and how he uses it. Thus, it is on one side, the study of wealth and on the other and more important side, a part of the study of man.” Some Economists have also emphasized the judicious use of scarce resources and trade-offs wherever necessary through economizing, though technology in the form of sustainable solutions may eventually make this definition less relevant, and usher in a new era in Economic theory. A scarcity based definition has been provided by Lionel Robbins who states, “Economics is a science which studies human behavior as a relationship between ends and scarce means which have alternative uses.” Economics is therefore sometimes referred to as the science of ‘constrained choice’. Economics is broadly divided into microeconomics and macroeconomics. The field of Microeconomics studies the economic behavior and decision-making processes of individuals and economic decision makers. On the other hand, Macroeconomics studies the functioning of the economy as a whole through the use of suitable metrics and indicators, and analyses entire industries and economies.<sup>7 8 9 10</sup>

The history of economic thought comprises different thinkers and theories in the subject that is now known as economics, from the ancient times to the 21st Century, and Economics has comprised many different schools of thought through the ages. The history of Economic thought does not however, include the study of economic events such as the Great Depression or the Dot.com bubble; thus, this approach is more theory and philosophy-oriented than history-oriented. In Ancient Greece, the polymath Hesiod who was a contemporary of Homer, wrote the earliest known work concerning the basic origins of economic thought, in the Seventh Century BC. The Greek philosopher Aristotle also examined ideas about wealth acquisition, and questioned whether property was best left in private or public hands. He also analyzed different forms of the state such as monarchy, aristocracy, oligarchy, tyranny and democracy. Xenophon of Athens authored ‘Oeconomicus’ in the fourth century BC, which was a treatise on household management and agriculture. Plato’s work ‘The republic’ discussed forms of government, specializations of labour and production, and also developed a credit theory of

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<sup>7</sup> Economics: Nineteenth Edition, PAUL A. SAMUELSON, Institute Professor Emeritus, Massachusetts Institute of Technology, WILLIAM D. NORDHAUS, Sterling Professor of Economics, Yale University

<sup>8</sup> Blaug, M. (1997). *Economic theory in retrospect* (5th ed.). Cambridge, UK: Cambridge University Press

<sup>9</sup> MICROECONOMICS: FOURTH EDITION, DAVID A. BESANKO, Northwestern University, Kellogg School of Management RONALD R. RAETIGAM, Northwestern University, Department of Economics, The University of Chicago, Booth School of Business, JOHN WILEY & SONS, INC.

<sup>10</sup> MICROECONOMICS: Principles and Analysis, Frank A. Cowell, STICERD and Department of Economics, London School of Economics, December 2004

money. In Ancient China, Fan Li, an adviser to King Goujian of Yue of the fifth century BC, wrote on economic issues and developed a set of "golden" business rules. In Ancient India, Chanakya of the Mauryan Empire, wrote the Arthashastra which was a treatise on statecraft, economic policy and military strategy. The Arthashastra which was compiled between 300 BC and 200 CE, stated that there were four important fields of knowledge, i.e., the Vedas, the Anvikshiki (the science of enquiry), the science of government and the science of economics, which included cattle, business and trade.

Thomas Aquinas (1225–1274) was an important Italian economic writer and a Catholic priest. He was a part of a group of Catholic scholars known as the Schoolmen. In the unfinished treatise 'Summa Theologica', Aquinas dealt with the concept of a just price, which is similar to the modern concept of long run equilibrium, a price that was just sufficient to cover the costs of production, including the maintenance of a worker and his family. He opined that it was immoral for sellers to raise their prices beyond this point, and for lenders to charge interest on loans. One of Aquinas' main critics was Scottish philosopher Duns Scotus. In his work 'Sententiae' (1295), he argued that buyer and seller usually have different ideas of a just price. If people did not benefit from a transaction, they would not trade. Another early economist French philosopher Jean Buridan was the originator of the metallic theory of money, and looked at money from two angles: its metal value and its purchasing power, which he acknowledged could vary. He argued that aggregated, not individual, demand and supply determine market prices. Hence, for him a just price was what the society collectively and not just one individual is willing to pay. Another French philosopher and priest Nicolas d'Oresme wrote an important work about the origin and nature of money. Saint Antoninus of Florence was another influential writer who addressed social and economic development, and was among the first to argue that the state had a duty to intervene in mercantile affairs for the common good, and an obligation to help the poor and needy.<sup>11</sup>

The fourteenth century Islamic writer Ibn Khaldoun was another important intellectual who developed a theory of the lifecycle of civilizations, the specialization of labor, and the value of money as a means of exchange rather than as a store of inherent value. He also developed ideas on just taxation, but his work was not immediately recognized in the west.

In the Western world, economics was not a separate discipline, but part of philosophy until the 18th–19th century Industrial Revolution and the 19th century Great Divergence, which accelerated economic growth in the Western world, and eclipsed development elsewhere.

Mercantilism dominated Europe from the sixteenth to the eighteenth century, as it emerged from feudalism and the dark ages, and headed towards proto-industrialization. After the

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<sup>11</sup> Medema, S., & Samuels, W. J. (2003). *The history of economic thought: A reader*. London: Routledge

voyages of Christopher Columbus, Magellan, James Cook, Balboa and other explorers opened up new opportunities for trade with the New World, monarchies wanted external trade to boost their economic power. Mercantilism was a political movement and an economic theory that advocated the use of the state's powers to ensure that local markets and supply sources were protected, and exports and one-way trade boosted. Mercantile theorists and advocates such as Jean-Baptiste Colbert held that international trade could not benefit all countries at the same time. In their view, Money and precious metals were the only source of riches. Therefore, tariffs should be used to encourage exports, which bring money into the country, and discourage imports which drain resources. In other words, a positive balance of trade must be maintained, and imports discouraged at all costs. Even though Mercantilism was never elevated to the level of a systematic scientific theory, mercantilist ideas manifested themselves in many acts such as the Navigation Act of 1651 and the Sugar Act of 1764, and such policies were implemented by the British and the Dutch East India Companies. The term mercantilism was however not coined until 1763, by Victor de Riqueti, Marquis de Mirabeau, and popularized by Adam Smith in 1776, who opposed it.

In the sixteenth century, the Jesuit School of Salamanca in Spain initially founded by Spanish theologians took economic theory to a new high, but their contributions remained largely forgotten until the 20th century until they were brought to light by Austrian Economist Joseph Schumpeter in his 'History of Economic Analysis' published in 1954, and by the English Economist Marjorie Grice-Hutchinson. This school is often referred to as the 'first economic tradition' in the field of economics, and important contributors were Martin de Azpilcueta, Luis de Molina, Jean Bodin, Domingo de Soto and Tomas de Mercado. The University of Salamanca and the University of Coimbra played a major role in this tradition.<sup>12</sup>

In 1516, the English humanist Sir Thomas More published his work 'Utopia', which describes an ideal society where land is owned in common and there is universal education and religious tolerance, which later inspired the English Poor Laws of 1587 and the communism-socialism movement on the Nineteenth century. In 1517, astronomer Nicolas Copernicus originated the quantity theory of money which states that the general price level of goods and services is directly proportional to the money in circulation. In 1519, he published the earliest version of what later came to be known as Gresham's Law. This law states that "Bad money drives out good".

In 1568, French jurist and political philosopher Jean Bodin published the first known analysis of inflation endorsing the quantity theory of money. In 1598, French mercantilist economist Barthelemy de Laffemas published a work containing the first known mention of under-consumption theory, which was later refined by John Maynard Keynes. Debates over free trade

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<sup>12</sup> Paola Tubaro. History of economic thought. Rhona C. Free. 21st Century Economics: A Reference Handbook, Sage Publications



and the desirability of government regulation of companies date back to 1622 when English merchants Edward Misselden and Gerard Malynes had a heated discussion on the desirability of state regulation. In the sixteenth century, English economist Thomas Mun strongly advocated mercantilist policy, and became the last among the early Mercantilists, even though his works were not published until his death.

Sir William Petty is often considered to be the first 'Scientific Economist' because he applied the scientific tradition of Francis Bacon to Economics, preferring to use measurable phenomena and seek quantitative precision, and using statistical mathematics in his analysis too. This preceded econometrics by several centuries. During the time of King Louis XIV in France, national guilds to regulate major industries, and is regarded as the first attempt to regulate industry by government. In 1695, French economist Pierre Le Pesant, Sieur de Boisguilbert became the first economist to question mercantile economic policy and chose to value the wealth of a country by its production and exchange of goods instead its assets. Hugo de Groot and Anders Chydenius were among the earliest Economists to advocate free trade, and they expressed their ideas in legal terms. In 1696, British mercantilist Charles Davenant became the first economist to study consumer demand and perfect competition. In 1767, Scottish mercantilist economist Sir James Stuart published "An Inquiry into the Principles of Political Economy", which was the first complete economics treatise.

The British Enlightenment took place in the seventeenth and eighteenth centuries riding on the general renaissance in Europe, and spurred the advancement of economic thought. Irish-French Economist Richard Cantillon wrote an important treatise on human reason and market competition in the economic world in 1730, and his works came to be known as "the cradle of political economy". Another important English enlightenment thinker John Locke combined philosophy, politics and economics into a coherent framework. Locke believed that people contracted into society, which was bound to protect their property rights. He defined property to include people's lives and liberties, and their wealth. Locke argued that not only should the government stop interference with people's property, but also that it should work to ensure their protection.

Dudley North and David North were other influential economists of the era, and both opposed the unintended consequences of mercantilism. A Frenchman named Vincent de Gournay was one of the early Physiocrats, a Greek word meaning "Government of nature", who held that agriculture was the source of wealth, an idea also mirrored by Francois Quesnay. He also opposed government regulation, stating that it inhibited commerce and trade. The Physiocrats criticized cities for their artificiality and advocated natural styles of living. The Physiocrats' economic theory, had the notion of a circular flow of income throughout the economy. Others like Anne Robert Jacques Turgot who advocated liberalism, divided society into three classes:

the productive agricultural class, the salaried artisan class and the landowning class. In 1751, Neapolitan philosopher Ferdinando Galiani published a treatise on money called *Della Moneta* (On Money), 25 years before Adam Smith's 'The Wealth of Nations', which is one of the earliest modern economic analysis. It covered all modern aspects of monetary theory, including the value and origin of money, its regulation, and inflation.

The Scottish Philosopher Adam Smith is widely considered to be the father of modern Economics and played a key role in the Scottish Enlightenment. His 1776 publication 'An Inquiry Into the Nature and Causes of the Wealth of Nations' coincided not only with the American Revolution, but also with the dawn of a new industrial revolution that led to a new level of prosperity. Adam Smith argued for the self-regulating invisible hand, and that the idea that wealth was derived solely by self-interest, and not by benevolence, magnanimity or charity. Thus, Adam Smith advocated a free market economy, based on secure property, capital accumulation, widening markets and a division of labour with a limited role for the government. He was therefore opposed to mercantilism, which he felt stunted specialization. Smith was also known for his study of productive and non-productive labour. Adam Smith's ideas were carried forward by William Pitt the Younger, and others. Other thinkers of the age were Jeremy Bentham who developed the concept of utilitarianism to maximize happiness and minimize pain, David Ricardo, known for his theory of Comparative Advantage, and Jean-Baptiste Say who developed Say's law which stated that supply always equaled demand.

John Stuart Mill was another dominant figure of political economic thought of his time, and one of the most influential thinkers in the history of classical liberalism. Mill's textbook, published in 1848, and titled 'Principles of Political Economy' was a summary of the economic thought of the time. Mill searched for a middle ground between Adam Smith's view of expansion due to trade and technological innovation and Thomas Malthus' view of the limits of population growth and imagined imminent famine due to food shortages as expounded in "Essay on the Principle of Population". Another important theory of this period was the labour theory of value, which argued that the economic value of a good or service was determined by the socially necessary labour required to produce it. This contrasted with value deriving from a general equilibrium theory of supply and demand. A school within classical economics formulated the under-consumption theory. This theory argued for government action to mitigate unemployment and economic downturns, and was a predecessor of Keynesian economics of the 1930s. Another notable school was Manchester capitalism, Manchester liberalism or Manchesterism of Richard Cobden and John Bright, which advocated free trade, and government policy based on free trade.

The German philosopher Karl Marx was a leading thinker of his day (and one of the most influential thinkers till date) and wrote 'Das Kapital' which along with his 'Communist

manifesto', became his most important works. He also defined concepts such as the bourgeoisie and the proletariat. According to Marx, Capitalism was based on exploitation and inherent contradictions, and it would eventually lead to revolution by the masses, and the establishment of a classless society. In this society, the means of production would be commonly owned by the proletariat. Marx used the word "commodity" and stated that when people mixed their labor with an object it became a "commodity". However, commodities have a dual nature, a dual value. He distinguished the use value of a thing from its exchange value. The use value of a commodity existed only as that commodity is used or consumed. Marx claimed that employers pay their workers less in "exchange value" than the workers produce in "use value". The difference, in Marx's terminology, is "surplus value". Capitalism according to Marx, is a system of exploitation. With every economic boom and recession, Marx claimed, conflict between capitalists and workers would increase. In Marxist theory, society consists of two parts, the base and the superstructure. The base comprises the forces and relations of production, and determines the superstructure which determines culture, institutions and power structures of a society. Thus, Marxist theory greatly emphasized material needs of society. However, his vision of a utopia did not come to pass, and his theories led to totalitarianism, with most communist societies degenerating into dictatorships. Marx also never understood the dynamism and flexibility of Capitalism and its potential to create wealth. Marxism also incorporates methods of socioeconomic analyses that views class relations and social conflict using a materialist view of history, and a dialectical view of social transformation, and strongly influenced historiography as well.

In 1879, the American Economist Henry George published a treatise on why poverty accompanies progress and boom follows bust which was widely circulated. Henry George is recognized as the inspiration for the economic philosophy known as Georgism. This philosophy states that while people should own the value they produce themselves, economic value from land and natural resources should belong to all members of society. His work led to the dawn of the Progressive Era, and the reforms that accompanied it. Georgism declined in the second half of the 20th Century as the Marxist and Austrian and Keynesian neoclassical schools gained popularity. Paul Samuelson listed Henry George as one of the six "American saints" in classical economics, and he partially influenced many modern writers such as Joseph Stiglitz and Milton Friedmann. In 1895, the London School of Economics (or the LSE) was founded by Fabian Society members (The Fabian society had been founded in 1884 and was named after the Roman general Quintus Fabius Maximus) Sidney Webb, Beatrice Webb, R H Tawney and George Bernard Shaw, for the betterment of English society and for the advancement of democratic socialism through a gradual process rather than a sudden overthrow. It merged with the University of London in 1900, and began its own degree courses in 1901. Fabian Socialism later came to be associated with economic stagnation and decline.

Neoclassical economics was another school of Economics which developed in the 1870s, focusing on the determination of goods, outputs and income distributions in the markets through supply and demand, though the term was introduced by Thorstein Veblen only in 1900. Further definitions of Neo-classical economics were provided by Colander, Rosser and Holt (2004), and by Arnsperger and Varoufakis (2006). There were many branches in Neoclassical Economics such as the Austrian school, Cambridge School, and the Lausanne school, and the term is sometimes used as an umbrella term to cover other concepts. The Cambridge School was founded with the 1871 publication of Jevons' 'Theory of Political Economy', and developed theories of partial equilibrium focusing on market failures. Its adherents were Stanley Jevons, Alfred Marshall, Arthur Pigou and Francis Y. Edgeworth, and many of these Economists laid the foundations for modern Microeconomics. The Austrian School of Economics comprised Austrian economists Carl Menger, Eugen von Bohm-Bawerk, and Friedrich von Wieser, who developed the theory of capital and tried to explain economic crises. The Lausanne School, led by Leon Walras and Vilfredo Pareto, was the third school which developed the theories of General Equilibrium and Pareto efficiency. It was founded with the 1874 publication of Walras' Elements of Pure Economics. Walras suggested that free markets tended towards equilibrium in the long run, and served the needs of countries very well. In 1933, Joan Robinson and Edward H. Chamberlain published works on imperfect competition and monopolistic competition, taking Neoclassical Economics in a new direction. Neoclassical Economics along with Keynesian Economics dominates mainstream microeconomics today, although it has not been free from criticism. The British Economist Alfred Marshall is also credited for his attempt to use mathematical analysis in economics, and transform it into a more scientific profession without obliterating the basic concepts of Economics. He was the first professor of economics at the University of Cambridge, and abandoned the term "political economy" for the term "economics". Economic schools of thought are also sometimes classified into orthodox schools and heterodox schools, where the latter is based on a criticism of the former, and often recommends radical approaches.

William Stanley Jevons popularized the marginal utility theory which states that the marginal satisfaction of goods and services decreases as consumption increases. An example of the Theory of Diminishing Marginal Utility is that for every cake one eats, one gets less and less pleasure until an additional cake makes an individual sick. This was later developed into the Equimarginal Principle which states that an individual arranges his consumption so that the last dollar spent on each good brings him the same marginal utility. The principles of Marginal Utility were also used to solve several real-world problems such as the famous water-diamond paradox. Other Economists formulated the marginal theory of value and the General Equilibrium theory which states that the interacting forces of demand and supply bring about equilibrium. Thus, marginalism also explains for example, why the price of diamonds is higher than water- this is because diamonds have a higher marginal utility than water. Some other

Economists proposed the Constancy of the Marginal Utility of Money which stated that the marginal utility of money was constant. When economics at was beginning to be dominated by mathematical analysis, the followers of Carl Menger, Eugen von Bohm-Bawerk and Friedrich von Wieser (1851–1926) began the use of deductive logic in Economics instead. This group became known as the Austrian School of Economics, reflecting the Austrian origin of many of the early adherents.

In 1881, Irish economist Francis Ysidro Edgeworth introduced indifference curves (a graph that shows a combination of two goods that gives customers equal satisfaction and utility, thereby making them indifferent) and the generalized utility function (preferences regards goods and services), along with Edgeworth's Limit Theorem (examines range of possible outcomes which results from free market exchange or barter), extending the Bertrand Model to handle capacity constraints, and proposing Edgeworth's Paradox where two players cannot reach a state of equilibrium with pure strategies, each charging a stable price.

Friedrich Hayek argued that the market was a "spontaneous order" and actively disparaged the concept of "social justice". Ludwig von Mises's criticism of socialism had a major influence on the economic thinking of Austrian School of economics. Hayek believed that centralizing economic decision-making would lead not only to infringements of liberty but also to lower standards of living. In the mid-1840s, German economist Wilhelm Roscher founded the German historical school of economics, which promoted the cyclical theory of nations—economies passing through youth, manhood, and senility. This theory became popular in British and American circles as well. In the 1890's, Thorstein Veblen became one of the best-known early critics of the "American Way". In his 1899 work, 'The Theory of the Leisure Class', he scorned materialistic culture and profiteering. In 1911, Joseph Alois Schumpeter introduced the concept of innovation in his work "Theory of Economic Development", and explained how innovation was a driver in Economic growth.

After World War I, there was a major boom in the USA known as the roaring twenties. This was followed by the Wall Street Crash of 1929 which led to the Great Depression. The most important development in economic thought during the Great Depression was the Keynesian revolution, triggered by the publication in 1936 of 'The General Theory of Employment, Interest, and Money' by the British Economist John Maynard Keynes. His approach criticized laissez-faire economics, and advocated more governmental control. It studied the impact of spending on output and inflation, and unlike economists and governments of the era, advocated increased government expenditure to pull economies out of the then prevailing Great Depression. His ideas were eventually implemented by Franklin D. Roosevelt in the 1930's, and led to a sustained economic recovery. Better control of private businesses was also advocated by Adolf Berle and Gardiner C. Means during the Great Depression. In 1933,

American economist Edward Chamberlin published "The Theory of Monopolistic Competition". The same year, British economist Joan Robinson published "The Economics of Imperfect Competition". Together, they founded Industrial Organization Economics which examines the relationship between firms and markets. Chamberlin also founded Experimental Economics which deals with the application of experimental methods to study economic questions.

In the 1930s, Ragnar Frisch and Jan Tinbergen pioneered Econometrics which used statistical methods in economic analysis, receiving the first Nobel Prize in Economics in 1969. After the war, Wassily Leontief developed the Input-Output Model of economics, which uses linear algebra and was suited to computers, receiving the 1973 Nobel Economics Prize. After World War II, Lawrence Klein pioneered the use of computers in econometric modeling, receiving the 1980 Nobel Economics Prize. Ragnar Frisch's assistant Trygve Haavelmo received the 1989 Nobel Economics Prize for clarifying the probability foundations of econometrics and for analysis of simultaneous economic structures.

The government-interventionist monetary and fiscal policies that the postwar Keynesian economists recommended were attacked by economists at the University of Chicago, known as the Chicago School of Economics. Before World War II, the Old Chicago School of Keynesians was founded by Frank Knight, Jacob Viner, and Henry Calvert Simons. The second generation reasserted a libertarian view of market activity which promoted non-interference in people's affairs. Milton Friedman of the Chicago School of Economics is one of the most influential economists of the late 20th century, receiving the Nobel Prize in Economics in 1976. He is known for "A Monetary History of the United States" (1963), in which he argued that laissez-faire government policy is more desirable than government intervention in the economy. Friedman was also known for his work on the consumption function, and the Permanent Income Hypothesis of 1957. This work stated that rational consumers would spend a proportional amount of their permanent income, and windfall gains would mostly be saved. Other important contributions include his critique of the Phillips Curve, and the concept of the natural rate of unemployment of 1968.

In 1898, the American Economist Thorstein Veblen coined the term Evolutionary economics, making use of anthropology to deny that there is a universal human nature, emphasizing the conflict between "industrial" or instrumental and "pecuniary" or ceremonial values, and this came to be known as the Ceremonial/Instrumental Dichotomy. He was a well-known critic of capitalism, and developed the term conspicuous consumption which was further developed by C. Lury, D. Slater, Jean Baudrillard and others. Joseph Alois Schumpeter was an eminent Austrian School economist and political scientist of the period known for his work on business cycles and innovation. In 1944, Hungarian-American mathematician John von Neumann and Oskar Morgenstern published Theory of Games and Economic Behavior, founding Game

Theory, and the theory of non-competitive games, which was widely adopted by economists. In 1951, Princeton mathematician and Nobel Prize winner John Forbes Nash Jr. published the article Non-Cooperative Games, becoming the first to define a Nash Equilibrium for non-zero-sum games.

After World War II, Canadian-born American Economist John Kenneth Galbraith became one of the activists for pro-active government and liberal-democrat politics. In "The Affluent Society" (1958), Galbraith argued that voters reaching a certain material wealth begin to vote against the common good. He also argued that the "conventional wisdom" of the conservative consensus was not enough to solve the problems of social inequality. Businesses set prices and use advertising to create artificial demand for their own products, distorting people's real preferences. Consumer preferences are highly influenced by corporations. Post-war economists began to synthesize Keynes' work with mathematical representations. Economics courses began to present economic theory as a unified whole in what is referred to as the neoclassical synthesis. This school absorbed the macroeconomic thought of Keynes into Neoclassical Economics. "Positive economics" became the term created to describe certain trends and "laws" of economics that could be objectively observed and described in a value-free way, separate from "normative economic" evaluations and judgments. The Paul Samuelson's "Foundations of Economic Analysis" published in 1947 was an attempt to show that mathematical methods could represent a core of testable economic theory. His introductory textbook Economics was influential and widely adopted. It became the most successful economics text ever. Paul Samuelson was awarded the new Nobel Prize in Economics in 1970 for his merging of mathematics and political economy.

In the early 1970s, American Chicago School economist Robert E. Lucas, Jr. founded New Classical Macroeconomics based on Milton Friedman's monetarist critique of Keynesian macroeconomics, and the idea of rational expectations, first proposed in 1961 by John F. Muth, opposing the idea of government intervention in the economy. The Policy-Ineffectiveness Proposition of Thomas J. Sargent and Neil Wallace, which seemed to refute a basic assumption of Keynesian economics was also adopted. The Lucas aggregate supply function states that economic output is a function of money or price "surprise." Lucas was awarded the 1995 Nobel Economics Prize. The Freshwater or the Sweetwater school of economics of the 1970's challenged many of the earlier assumptions in Macroeconomics and was based the faculties of the University of Chicago, Carnegie Mellon University, and Cornell University. These terms were coined by Robert E. Hall in 1976. This period also saw the emergence of the 'synthesis school' which attempted to integrate several disparate concepts in microeconomics and macroeconomics. Achieving a consensus however proved elusive, and there was no single widely recommended approach.

In 1979, American economist Paul Krugman published a paper founding 'New trade theory', which explained the role of increasing returns to scale and network effects in international trade. In 1991 he published a paper founding 'New economic geography'. His textbook 'International Economics' (2007) became extremely popular. He was awarded the Nobel Prize in Economics in 2008. Indian economist Amartya Sen expressed skepticism about neoclassical assumptions, and was highly critical of rational expectations theory proposed by John F. Muth and used by Robert Lucas Jr. and others, devoting his work to Development Economics and human rights. Sen's work in the field of development economics has had considerable influence in the formulation of the "Human Development Report", published by the United Nations Development Programme. Sen was awarded the Nobel Prize in Economics in 1998. In 2019, Abhijit Banerjee, Esther Duflo and Michael Kremer won the Nobel Prize for their experimental approach in alleviating global poverty. Another interesting sub-field in Economics is Economic history which is the historical study of Economies, and research in this field is conducted using historical methods, statistical methods, and the application of economic theory to historical analysis using and qualitative data. Niche areas such as Feminist Economics whose foundations have been laid by Barbara Bergmann and others have also been proposed in the recent past.

Newer approaches are also being tried all the time. For example, Jeffrey D. Sachs has helped Eastern European economies merge with western economics after the fall of the Iron curtain, through his unique strategies. Heterodox Economics comprises fields of economic thought which contrast with orthodox schools of Economic thought these include institutional, evolutionary, feminist, social, ecological, and anarchist economics, to name a few. Movements promoting pluralism in Economics have tried to incorporate a wide variety of viewpoints in formulating economic theory, even though these have sometimes been labeled fringe by mainstream Western economists. However, very little has been done yet to take into consideration the views of developing countries while formulating policy and concepts, though there is a growing realization of the need for alternative developmental models in many parts of the world such as India. The New Left is a political movement which seeks to make Marxist ideas and ideals relevant to the 21<sup>st</sup> Century and owes its existence to the ideas of Herbert Marcuse and others, and was popularized by Bhaskar Sunkara, Lucio Margi, Ralph Miliband, Perry Anderson and other intellectuals. The New Left began as a political movement in the west, and comprised of western activists and intellectuals. According to some, it was a reaction against traditional Marxist ideas of dialectical materialism and class struggle. It was also related to the New Communist Movement which was a diverse left-wing political movement in the United States in the 1970's and 1980's. It comprised groups such as the Bay Area Revolutionary Union and other groups. The term 'New Left' was popularized in the writings of the Sociologist C. Wright Mills, and the term can be traced way back to the year 1960, in a letter penned by



him. Socialism in some form is supported today by American thinkers such as Bernie Sanders and Noam Chomsky and other associations throughout the world.<sup>13 14</sup>

### **Interface between Anthropology and Economics**

Many efforts have been made to integrate the fields of Anthropology and Economics in the past, though we consider them insufficient given that the two fields are naturally aligned, and must be synthesized to a greater degree than has been accomplished at present. Many early Anthropologists however, made some contributions in this regards, examples being the study of age and gender in the division of labour, and the classification of different types of simple societies on the basis of economic activity. Other Anthropologists attempted cross-cultural studies of the economic activities of simple economies. We reproduce the details of some of the efforts that have been made to integrate the two fields below:

### **Economic Anthropology**

Economic anthropology is a field that attempts to explain human economic behaviour in relation to cultural factors which include historical, geographical and biological factors. It aims to amalgamate the fields of both economics and anthropology. It is largely practiced by anthropologists as of date, and not by mainstream economists and has a complex relationship with the discipline of economics, and does not approve of many principles of economics. This term was coined by NSB Gras, an economic historian, who defined it as a synthesis of anthropological and economic studies, and a study of the ways in which primitive people obtained a living.

Its origins as a sub-field of anthropology began with work by the Polish-born British Anthropologist Bronislaw Malinowski and the French Sociologist Marcel Mauss on the nature of reciprocity or obligatory gift-giving as an alternative to market exchange. For the most part, studies in economic anthropology focus on exchange based on the work done on Kula exchange ceremonies by Trobriand Islanders. In contrast, the Marxian school known as "political economy" focuses on production which special emphasis on relations with custom, law and government. (Honnigman, 1973) In later years, scholars like Wolf also studied the impact of capitalistic and industrial societies on traditional economies. After the Second World War, economic anthropology was highly influenced by the work of Austro-Hungarian economic historian Karl Polanyi. Polanyi argued in his work "The great transformation" published in 1944, that true market exchange was limited to western, industrial societies. He argued that applying formal economic theory (Formalism) to non-industrial societies was wrong. He argued that in non-industrial societies, exchange was not always commercial and was embedded in non-

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<sup>13</sup> Foundations of Economics: Fourth Edition, Andrew Gillespe, Oxford, 2016

<sup>14</sup> Economics, Paul Samuelson, William D Nordhaus, 19<sup>th</sup> Edition, Tata McGraw Hill, New Delhi, 2010

market institutions such as kinship, religion, and politics, and was highly influenced by social and cultural environments. He labelled this approach "Substantivism". This is also referred to as social embeddedness which is the dependence of a sphere of economic activity on institutional, social, cognitive and cultural factors, and mores, values and norms. This implies cultural relativism, and the idea that scarcity is not universal. Thus, there were different concepts such as reciprocity, redistribution, and market exchange. The formalist–substantivist debate was highly influential and attempts were made to classify societies into two categories based on this distinction. In the 'substantivist revolution' of the 1950's, there was a heightened anti-economics position, and mainstream economics was seen as not being applicable to traditional economies. (Le Clair and Schneider, 1968) Sahlins and Dalton also argued that the economy was merely a process of provisioning society, and that while social relations or institutions were not purely economic in nature, they could serve economic purposes. However, Formalists such as Raymond Firth and Harold K. Schneider asserted that the neoclassical model of economics could be applied to any society if appropriate modifications are made, arguing that its principles have universal validity. This distinction has also become somewhat blurred with the advent of globalization, and cultural homogenization. Scholars like JI Prattis have also argued that distinguishing between Western and traditional societies is problematic, and these two groups of societies are rather different. Neo-substantivism proposed by Mark Granovetter and others is now the prevailing view of thought, (This emphasizes rational choice in a cultural context) and the operations of corporations, banks, and the global financial system are being studied from an anthropological perspective. Stephen Gudeman and others also argue that economic processes are culturally constructed, and people have their own mental maps of economics. Gudeman based his conclusions on a study of a peasant community in Panama. Therefore, economic concepts such as exchange, money or profit must be analysed through the locals' ways of understanding them, and rather than devising universal models rooted in Western concepts and applying them indiscriminately to all societies, scholars must understand the local ethos. Others like Henri Maine distinguished between the status-driven relations of traditional societies and the contractual relations of modern societies.

Bronislaw Malinowski's important work, *Argonauts of the Western Pacific* published in 1922, based on the study of Trobriand Islanders between 1915 and 1918, and the Kula system also established the Participant-observation method and prolonged fieldwork as the gold standard in Anthropology. He traced the network of exchanges of bracelets and necklaces across the Trobriand Islands, Malinowski established that they were part of a system of exchange, the Kula ring. He concluded that this exchange system was closely linked to political authority, and custom. This economic system is also referred to as a gift economy based on reciprocity. This later became the subject of extensive debate with Marcel Mauss, and incidentally, the system was again studied by Annette Weiner many decades later, albeit from a feminist point of view. Marshall Sahlins, an American cultural anthropologist, identified three main types of

reciprocity in his book 'Stone Age Economics' published in 1972 i.e. Gift or generalized reciprocity which is the exchange of goods and services without keeping track of their exact value, balanced or symmetrical reciprocity which occurs when someone gives to someone else, expecting a fair and tangible return, and market or negative reciprocity which is the exchange of goods and services whereby each party intends to profit from the exchange, often at the expense of the other. Other studies of indigenous non-market exchange were carried out by the American Anthropologist Paul Bohannan and Laura Brohannan (Tiv of Nigeria), J.H. Boeke (Dual economy), Clifford Geertz (dual economy in Indonesia), George Dalton (Sub-Saharan Africa), Schrauwers (North America), James C. Scott (moral economy), Arjun Appadurai (how objects flowed), Jonathan Parry and Maurice Bloch (preservation of social transactional order and its distinction from short-term market relations). Schrauwers and others also discussed how the transition to market economies happened with specific reference to the societies they studied, and how this was sometimes accompanied by oppositional moral economies.

Culturalism has been criticized by practitioners of many other schools of thought. Marxists have argued that culturalists are too idealistic in their notion of the social construction of reality and too weak in their analysis of material constraints on individuals that affect their livelihood choices. Also, in the age of globalization cultures are being integrated into the global capitalist system and are influenced by Western ways of thinking and acting. Cultural Economists expected that traditional forms of work and production would disappear in developing countries, and would be replaced by Western means of production. However, traditional sectors had not only persisted, but expanded in new and unexpected ways. Keith Hart and others began to refer to this as the informal sector.

Traditional cultures have also used a number of special purpose monies like wampum and shell money. These special purpose monies were used to facilitate trade, but were different from the universal money of market-based economies. Special purpose monies were frequently restricted in their use; they might be limited to a specific exchange sphere such as the brass rods used by the Tiv of Nigeria in the early twentieth century. Barter is widely used in traditional societies, but is now being replaced by money. David Graeber argues that the inefficiencies of barter in archaic society has been used by economists since Adam Smith to explain the emergence of money, a factor that led to the emergence of modern economies. Modern Economists propose an evolutionary development of economies which places barter, as a 'natural' human characteristic, at the most primitive stage, to be superseded by monetary exchange as soon as people become aware of its greater utility and efficiency. Others have analysed finance in traditional contexts. For example, Bill Maurer has examined how Islamic bankers seeking to avoid "Unislamic" usury have redefined the concept of money and finance in Indonesia. James Carrier, Associate of the Oxford Brooks University, has extended the cultural

economic and neo-substantivist position by applying their methods to the "science of economics" as a cultural practice. He has studied gifts and commodities, meanings of the market, governance and practice, and has researched in the United States, United Kingdom, Jamaica, and Papua New Guinea.

New insights were developed by French Sociologist Pierre Bourdieu, in analysing cultural explanations for economic actions. While other economists attempted to incorporate culture in their models, they did so by arguing that non-market "tradition" was the product of rational wealth maximizing action. Bourdieu argued strongly against this, arguing that rational action did not guide individuals. For example, in traditional Mexican villages, rich people would be asked to fulfil "cargo offices" in the church, and organize feasts in honour of the saints, but these acts were largely symbolic, traditional and ritualistic, and not driven by economic motives per se.

Corporations are also hiring anthropologists as employees and consultants, and Anthropologists are playing crucial roles in areas such as organization design, human resource management, proxemics, vendor and customers relations with a strong focus on cultural orientation. Anthropology has also dictated several other aspects such as product design, and design of work spaces. Newer fields of study such as Industrial Anthropology, Applied Anthropology in industry, and Anthropology of work are taking root. Marietta Baba (1997) has studied buying and selling of goods from a cultural perspective, and the contextual influences of trade and commerce. University of California Professor of Anthropology Aihwa Ong's "Spirits of resistance and capitalist discipline: factory women in Malaysia" published in 1987 was a trendsetter in this aspect. Her work inspired a generation of anthropologists who examined the role of women in corporations particularly in developing countries. Others like British Anthropologist Mary Douglas have studied how organizations think and function in a socio-cultural context. She has also developed a Cultural theory of risk which asserts that structures of social organization endow individuals with unique perceptions. George Marcus has called for anthropologists to focus on corporate elites, and has edited a series called "Late Editions: Cultural Studies for the End of the Century". Anthropologists like Jasmine Mahadevan and Jill Kleinberg have also carried out studies in large corporations providing an analysis from a cultural perspective.

Thus, as we can see, while there has been some attempt to integrate Anthropology and Economics, we consider them to be largely Eurocentric from our perspective because, non-western cultures were seen as objects of curiosity by Western Anthropologists, and there was very little interest in trying to improve the lot of the people studied. The field also appears to have languished of late, though institutes such as the Max Planck Institute of Social Anthropology have been making some effort to make the field more relevant for the times.

## **Anthropology and Public Policy**

English Anthropologist Edward Burnett Tylor referred to Anthropology as a policy science and suggested that it be used to improve human conditions. He also often referred to it as a reformer's science. (Sills 1968) In the 1860's, James Hunt, the founder of the Anthropological Society of London used the term "Practical Anthropology" to bridge the gap between Anthropological theory and practical problems. Bronislaw Malinowski also wrote about using anthropological knowledge for the benefit of people, and proposed a field called "Practical Anthropology". Early Anthropologists such as Henry R. Schoolcraft and William Duncan also sought to improve the conditions of the people they studied. In 1908, Northcote Thomas used anthropology in Nigeria as a part of the British administration (Foster 1969) in 1934, Anthropology was also used in the Indian Reorganization act of 1934 by John Collier and others, and led to the formation of tribal charters and constitutions. Applied Anthropologists were also hired by the War Relocation Authority to study the plight of Japanese prisoners in war camps. The Society for Applied Anthropology (SfAA) was founded in 1941 by Margaret Mead, Fred Richardson and Elliot Chapple to apply Anthropology to practical problems to solve social and economic problems.

The British Government employed anthropologists as consultants in institutions such as the military, foreign office, colonial office and India office, thereby increasing the practical use of anthropology even in colonies. The Colonial Development and Welfare Act (CDWA), and the Colonial Social Science Research (CRRSC) were established to further social science research in colonies. Anthropologists also collected important economic data during the Great Depression and the New Deal, paving the way for better administration. The Applied Anthropology Unit and the Bureau of Indian affairs also researched American Indian tribes, their settlement patterns, and their economic development. In the early 1940's, action research methodology was employed by Laura Thompson to bring about changes in the Hopi administration. The American Department of Agriculture's Rural Life studies studied the political economy of agribusiness in California, and was carried out by Walter Goldschmidt and others.

Another new field was Action Anthropology which was coined by Sol Tax at an American Anthropological Association meeting in Chicago, and was an outcome of experiments with Fox Indians in Iowa in the 1950's Action Anthropology has been used to solve practical problems of human welfare in a variety of situations. (Holmberg 1970). It is applied when an Anthropologist desires to help a group of people towards a goal, and also wants to enhance human knowledge. This approach also criticizes top-down approaches, and outside-in approaches. Action Anthropologists try to become a part of the communities they study, understand their social and cultural worlds, and adopt non-directive approaches by respecting the freedom of communities to choose their own direction. (Barth 2002)

Institutional Anthropologies came up in the 1980's (Bennett 1996), and participatory methods such as Action Research, Participatory Action Research and Cultural Action were adopted by researchers such as Paulo Friere of Brazil (Greenwood and Levin 1998) and involved a series of well-conceptualized and executed steps (Schensul 1973). In the Cultural Brokerage approach, Anthropologists mediate between people of different cultures, and improve communities access to resources. However, cultural differences often impeded progress, and led to friction as observed in Alor (Cora Du Bois), in the Project Camelot carried out in South America, and other projects carried out in Vietnam and Thailand. (Belshaw 1976) (Jones 1971)

Definitions of development have also often been based on Anthropological concepts. For example, Gunnar Myrdal viewed development as a process by which poverty is alleviated, inequality reduced, and opportunities for self-actualization increased. Another more recent development is the use of the Human Development Index or HDI, which seeks to overcome the deficiencies of Per capita income, Gross national product, and other measures. Terms such as 'Development Anthropology' were used by Anthropologists who found earlier approaches to be inadequate.

Advocacy is also becoming common in Anthropology. Advocacy is a political process by an individual or a large group which exerts influence on public policy within socio-cultural and economic system, and the framework of associated institutions. Advocacy groups have been formed in different parts of the world, and have helped improve the lives of marginalized and disadvantaged sections of society. Advocacy helps transform existing situations to ideal situations (Cohen, de la Vega and Watson, 2001), and some Anthropologists have argued that advocacy remains integral to Anthropology, and is rooted in the desire to transform people's lives. (Singer 1990) (Layton 1996) (Wade 1996) Other Anthropologists such as Scheper-Hughes, and Bourdieu have argued for a more involved and a radical approach to bringing about social change, while Hastrup and Elsass have argued for a more context-dependant approach. (Hiller and Rooksby 2005)

Till the 1980's Anthropological analyses of public policy have tended to be largely uncritical in nature, and often were driven by paid consultancy engagements. However, this is now beginning to change with the adoption of analytical approaches to strip policy threadbare. (Shore and Wright 1997) This is a part of a growing recognition that policy can play a critical role in enfranchising the dispossessed and the downtrodden in different parts of the world.

### **Cultural Economics**

Cultural economics is a branch of economics that studies the relation of culture to economic outcomes. A key question is how culture is related to economic outcomes and how it is related

to institutions. As a rapidly emerging field in behavioural economics, the role of culture in economic behaviour is being used for decision-making and policy formulation.

The study of religion, social norms, social mores, belief systems, family ties, investment patterns, economic relations between social groups and the culture of economics are also studied as a part of Cultural Economics. This includes the role of shared beliefs and preferences in shaping institutions and determining economic outcomes. Another area of study is how ideas and behaviours are spread among individuals through the formation of social capital, social networks, and processes such as social learning. Cultural Economists study religion, social identity, social norms, mores, family values. Ideologies, cultural orientation and their impact on economic systems and economic thought. This may include empirical modelling of cultural transmission within and across cultural groups.

Cultural Economist Said Elias Dawlabani has proposed the Gravasian value systems approach to macroeconomics, and his 2013 book “MEMEnomics: The next generation economic system”, has been translated into several languages. Cultural economics also investigates how wants and tastes are formed in society. This may be a result of nurture aspects, the type of environment one is raised in, or the internalization of one's upbringing that shapes their future wants and tastes. A key thought area that separates the development of cultural economics from traditional economics is differences in how individuals in different societies arrive at their decisions. It also studies how culture shapes consumerism, and vice versa.

Economists have also started to look at cultural economics with a systems thinking approach where the economy and culture are viewed as a single integrated system to better understand the interdependence of culture and economy on each other. Said Elias Dawlabani combines the ideas of value systems and values (values people attach to actions) with systems thinking to provide a framework that explores the effect of economic policies on culture. His work explores the intersections between various disciplines such as cultural development, organizational behaviour, and memetics in an attempt to provide a foundation of cultural economics.

This field has also seen great growth due to new economic studies that have studied issues from a cultural standpoint. For example, a study on Europeans living with their families into adulthood was conducted by Paola Sapienza, a professor at Northwestern University and found that people of Southern European descent tended to live at home with their families longer than those of Northern European descent, and that these differences could be attributed to culture alone.

Economist David Throsby has proposed the idea of culturally sustainable development which compasses both the cultural industries such as the arts and culture in the societal sense. He has

applied the following criteria for Cultural Economics with which he hopes to balance culture and economics for judicious decision making:

1. Advancement of material and non-material well-being: implies balance amongst economic, social, and cultural forces
2. Intergenerational equity and the maintenance of cultural capital: current generation must recognize their responsibility to future generations
3. Equity within the present generation: distribution of cultural resources must be fair
4. Recognition of interdependence: policy must understand the connections between economic, cultural and other variables within an overall system.

### **Cultural Finance**

Cultural finance a new field in behavioural economics which studies the impact of cultural differences on individual and group financial decisions and on financial markets. Cultural Finance seeks to combine Cultural theory with theory in Finance. Among the earliest papers in this field was "The Role of Social Capital in Financial Development" by Luigi Guiso, Paola Sapienza, and Luigi Zingales. The paper studied how differences in social capital (The network of relationships among people who live and work in a particular society, enabling that society to work efficiently) affected the pattern of financial contracts in Italy. This study found that in areas with high social capital, households invested less in cash and more in stock, used more checks, had greater access to institutional credit, and used less informal credit. In 2007, Thorsten Hens and Mei Wang showed that many areas of finance were influenced by cultural differences. Culture plays a major part in financial behaviour, and has major effects on the management and valuation of assets, repatriation patterns, stock valuation methods, company's earnings management and dividend payments. This has been pointed out by Shalom Schwartz, Geert Hofstede, Christian Leutz, and others. Cultural Finance is increasingly gaining traction nowadays, and potential applications include design of financial products and services.

### **Economic Sociology**

Economic sociology is the study of the social causes and effects of different economic phenomena, and the term was first coined by William Stanley Jevons in 1879, and later used by Emile Durkheim, Max Weber, Georg Simmel and others. The field is often divided into a classical period and a contemporary one, which is known as "New economic sociology". The classical period dealt with themes such as a transformation to modernity and several other related aspects such as the impact of religion on Economics and wealth distribution. Other areas of inquiry in contemporary economic sociology include the social consequences of economic exchanges. Notable contributors to economic sociology have included Fred L. Block, James S. Coleman, Paula England, Mark Granovetter, Harrison White, Paul DiMaggio, Joel



M. Podolny, Richard Swedberg, Lynette Spillman, Viviana Zelizer, Carlo Trigilia, Donald Angus MacKenzie, Jens Beckert, Amitai Etzioni, Laurent Thevenot, Patrick McGuire, Chuck Sabel, Wolfgang Streeck and Michael Mousseau. Social network analysis has been one of the primary methodologies of Economic Sociology. Granovetter's theory of the strength of weak ties (1973) which states that stronger the ties, the greater the chance of recurring and common ties, and Ronald Stuart Burt's concept of structural holes used to explain differences in social capital are two best known theoretical contributions of this field.

Economic sociology is also closely related to socioeconomics, and often overlaps with it. Socioeconomics deals with the philosophical, political, ethical and moral questions due to the interrelationships between economics and society also encompasses a study of local institutions and history. It is often used as a very broad term encompassing several well-entrenched and emerging fields of inquiry. Notable associations associated with Economic Sociology include 'The society for the Advancement of Socio-economics (SASE)' which publishes a peer-reviewed journal and whose members are involved in reviews of economies and economic processes. Fields such as Economic Sociology have counter-balanced Economics' drift towards Mathematics to a large degree, and have kept it strongly tethered to the realm of social sciences.<sup>15</sup>

### **Marxist Sociology**

Marxist Sociology refers to the application of Marxist perspectives to the study of sociological concepts. Marxism is believed to be both a political philosophy and a sociological method by its adherents, who claim it is scientific, systematic and objective. Marxist Sociology may be defined as "a form of conflict theory associated with Marxism's objective of developing a positive, empirical science of capitalistic society as a part of the mobilization of a revolutionary working class". The first Marxist school of Sociology was known as Austro-Marxism, and comprised thinkers such as Carl Grunberg and Antonio Labriola. Important theorists have included George Lukacs, Raymond Williams, Theodor Adorno, Jurgen Habermas, Max Horkheimer, Frederic Jameson, Stuart Hall, Walter Benjamin, Guy Debord, Ralph Miliband, Louis Althusser, Antonio Negri, Nicos Poulantzas, and others. Marxist Sociology also deals with social implications of Capitalism such as Commodity fetishism where commodities take precedence over social relationships.

### **Developmental Anthropology**

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<sup>15</sup> What is Socioeconomics? An Overview of Theories, Methods, and Themes in the Field, Simon Niklas Hellmich Forum for Social Economics · January 2015

Developmental Anthropology is a sub-field of Anthropology that applies Anthropological perspectives to developmental studies. In this subfield of Anthropology, international developmental projects and international aid are taken as the primary focus of attention. Decisions made by different entities such as states, institutes or businesses which seek to modify cultural, social, technical and economic aspects of a society are studied in great detail. Development may be defined as a desirable replacement for underdevelopment or backwardness. According to the economist Gunnar Myrdal, development is a process by which poverty is alleviated, inequality reduced, and opportunities for self-actualization increased.

Marxist Economists such as Martin Bronfenbrenner have also stressed on equitable development, and various metrics have been developed to measure inequality. Human Development Indices that measure various aspects such as Health, Education, Gender Empowerment, GDP, Per capita income and GINI co-efficients (based on work by Italian statistician Corrado Gini in 1912 – range of values between 0 and 1 higher numbers representing higher inequality) have also been developed. Other developmental theories have been proposed by Daniel Learner, Max Weber, Everett Hagen and Neil Smelser, and these have also emphasized a change in attitudes from fatalism and conservatism to modernity and acceptance of change, as a natural corollary of developmental processes. Grassroots development processes try to identify whether developmental models are inclusive and bottom-up or non-inclusive. Sustainable Development, Participatory Development and Sustainable Livelihoods Approaches are new concepts in Developmental Anthropology. Participatory approaches begin when members of a community identify problems of their own accord, and seek to remediate them. Anthropologists then guide community members towards their own goals. This approach therefore involves joint problem solving for positive social change. (Schensul and Schensul 1992) The Sustainable livelihoods approach assumes that freedom from poverty can be achieved with assets and livelihood strategies to achieve sustainable development. This approach identifies human capital, natural capital, financial capital, physical capital and social capital as the driving forces behind change.

Developmental Anthropology involves a meaningful analysis and constructive criticism of projects that seek to improve the well-being of marginalized and impoverished peoples and societies. Anthropologists play a major role in policy research, and many are appointed as policy advisors. Examples of questions that are sought to be addressed are effects of developmental models on poverty, gaps between planning and culture, and causes for non-attainment of objectives etc. Anthropologists, Sociologists and Economists such as Max Weber, Neil Smelser, Everett Hagan, Daniel Lerner and Gunnar Myrdal have also proposed modernization theories which seek to explain how societies move away from tradition to modernity. One of the core assumptions of Developmental Anthropology is the Dependency Theory (As opposed to the Modernization Theory) which states that resources flow from poor

to wealthy nations and that wealthy nations are unjustly enriched at the expense of the poor. Arturo Escobar, in his book "Encountering Development: The masking and unmasking of the Third world", argued that international developmental effects were a means for Developed countries to retain their stranglehold over their erstwhile colonies. Similar views were expressed by many other economists, particularly in developing countries. Nonetheless, more recent initiatives have demonstrated a radical departure from colonial era constructs where Anthropological initiatives unashamedly served the needs of colonizers, and Anthropologists often had limited leeway in formulating or changing policy through studies initiated on the ground.<sup>16</sup>

Anthropology also studies culture in relation to economic growth. According to Max Weber and Gunnar Myrdal, Hinduism along with its emphasis on karma and inaction is responsible for Indian non-materialism, and the entrenched idea of fatalism. This idea was however disputed by TN Madan, Scarlett Epstein and Milton Singer who demonstrated based on Anthropological studies that Indians were highly entrepreneurial, and that each culture had its own strengths which need to be capitalized. Another criticism of Anthropology has been that many Anthropologists have assumed that humans exhibited behavioural patterns that were culture-neutral in spite of its avowed objectives of cultural sensitivity. During the Second World War, American Anthropologists observed that Japanese prisoners tended to behave in a bizarre fashion when faced with the prospect of being captured. They tended to indulge in the practice of self-killing even before they were taken to prison. Many Japanese literally considered their Emperor to be God, and often followed his instructions very seriously, obeying his commands to take to war or lay down arms. It was only after a prolonged interaction that American Anthropologists were able to understand and become acquainted with the Japanese way of thinking. Another project which met with much ridicule was Project Camelot which was launched by Special Operations Research Office of the US army in 1964 in South America to counter the spread of communism. This project failed to take into account the pulse of the people, met with stiff governmental resistance in target countries and was eventually aborted. Another ill-fated project was the "Thailand Project" which was launched without taking local sensitivities into account. The Highland tribes of Thailand lived in semi-isolation and eked out a living by selling opium in the domestic market, and were ostracized by the society at large. This project failed to grapple with the complexities of relations between the government, society and highlanders and the findings were largely ignored.

Taking into consideration the limitations of current Anthropological theory, cross-cultural research should not be restricted to travelling to another culture, translating materials into the local language, and replicating a study there. (Heine et al., van de Vijver and Leung, 1997).

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<sup>16</sup> Encountering Development: The masking and unmasking of the Third World Arturo Escobar 2001

Researchers must avoid imposing their own viewpoints pertinent to their own culture, or learned from another culture into the culture being studied either consciously or sub-consciously. The latter, needless to say, is more easily said than implemented. They must also be sure that the independent and dependant variables are understood in the same way in different cultures. (Bond, 1988; Lonner & Berry, 1986). This would necessitate a radical, grounds up approach if this is to be achieved consistently. In spite of the limitations of cross-cultural research, this approach is likely to remain an indispensable component of Ethnographic research into the foreseeable future. Many researchers support the indispensability of the cross-cultural approach. For example, according to the social comparison theory, formulated by Leon Festinger (1954) and refined by others (Buunk and Gibbons, 2007) people learn about themselves by comparing themselves with others, and hence comparison is an essential process of self-discovery.<sup>17</sup>

In spite of many criticisms, Anthropology is now beginning to play a major role in policy making and governance. This became apparent many decades after the colonies of England and France began to get independence in the 1940's. While many colonies initially followed the socialistic pattern of development, they began to be rapidly integrated into the world economy once the process of globalization picked up steam towards the end of the Twentieth Century. "Anthropology in development" which involved the transfer of money and expertise from developed countries to developing countries through Governmental and Non-Governmental organizations and monitored by various funding agencies. This process began after the Second World War, but picked up steam in the 1980's. The World Bank, agencies of the United Nations, OXFAM, CARE, and others now hire Anthropologists in large numbers. Anthropologists also ensure that the benefits go to the needy and the deserving sections of society. This is in keeping with observations made by Murray Wax (Wax 1984) and others that Anthropology has been oriented towards ethics and social policy since its emergence as a distinct discipline and Edward B. Tylor (Tylor 1871), observations that the science of culture was essentially a reformer's science trying to balance the needs to various parties and provide the best value proposition to less advantaged societies or less advantaged sections of society. Anthropologists have also donned the hats of economists, educators, or agronomists, and have even played important roles in rehabilitation, disaster management and disease prevention and mitigation.

Developmental Anthropologists have also constituted a crucial link between the world of Anthropology and Economics, and have often sought to work with NGO's and other organizations and government departments to ensure that the fruits of western development were brought to other parts of the world or that development took place in accordance with people's aspirations. Developmental Anthropology in its present shape and form owes its origin

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<sup>17</sup> CONTEMPORARY ECONOMIC GROWTH MODELS AND THEORIES: A LITERATURE REVIEW, Ilkhom SHARIPOV, *CES Working Papers* – Volume VII, Issue 3

to the statement of the American President Harry Truman in 1949 that half the world was underdeveloped and needed Western help and has taken off in a major way since the 1970's, as major economic development and affirmative action programs being launched in different parts of the world.

### **Anthropology of Development**

Some Anthropologists also seek to make a distinction between "Anthropology of Development" and "Developmental Anthropology" (Escobar 1997). The term "Anthropology of development" is a field that studies developmental models from a critical perspective while Developmental Anthropology is less critical of mainstream developmental models. Examples of questions addressed by Anthropology in Development include questions such as reasons for increase in poverty, reasons for differences between plans and outcomes, lessons to be learnt from history, and lessons not learnt from it, reasons for use of external developmental models, and reasons for the failure of developmental models (Gow 1996). This approach has great value particularly in developing countries where western-imposed economic models were questioned or even disregarded.

The antecedents of this field can be traced to the Rhodes-Livingstone institute of 1937, which was established to conduct social science research in Central Africa. It was run by Max Gluckmann who strongly criticized colonial rule. This idea is also related to the 'Culture of poverty', a term proposed by Oscar Lewis. Per Lewis, poverty moulded the lives and attitudes of the poor, such that they could not longer escape them; thus, they became victims of the culture of poverty. Another related concept is the dependency theory with states that mainstream economic models are designed to make poor countries subservient to rich ones, and wealth always flows from poor countries to rich ones. This theory developed with inputs by Francois Perroux, Kurt Rothschild, Walden Bello, Keith Griffin, Kunibert Raffer, and others, though some contributors were left-leaning in their orientation.

### **Economic growth versus economic development**

It would also be necessary to introduce the growth versus development debate here in a nutshell. Economic growth is normally defined as the increase in inflation-adjusted market value of the goods and services produced in a country in a period in time. It is commonly measured as the rate of increase in Gross Domestic Product or GDP. An increase in economic growth may be caused by more efficient use of inputs (This is known as intensive growth) or increase in the amount of inputs (This is known as extensive growth). Economic development on the other hand, is a process by which the economic well-being of large sections of populations is improved in accordance with an economic plan, economic policies and goals. Economic growth may be skewed, and may not necessarily lead to comprehensive economic

development. Therefore, economic growth is only one aspect of economic development. Economic development is measured through more complex and comprehensive indicators which may vary from context to context. Sociologists have differed with most economists, and preferred to equate economic development with wider well-being of populations and social and cultural change. According to Manley, "Economic development is a process by which an economy is transformed from one that is dominantly rural and agricultural to one that is dominantly urban, industrial, and service in composition." [Manley 1987]. Thus, GDP growth need not always be accompanied by the creation of jobs (This is sometimes referred to as jobless growth), or wide-ranging wealth creation. Most sociologists have also distinguished between modernization and westernization. This has gained traction due to the emergence of tiger economies of the East, many of which have formulated their own development models. Another related debate is between 'standard of living' measured through the quantum of consumption of goods on one hand, and human welfare and happiness on the other. The two can be measured only indirectly through metrics, and the emphasis is now gradually shifting from the former to the latter. Economic growth has traditionally been measured by a growth in standards of living over a period in time, though these are increasingly being called into question as the impact of human endeavour on the environment is also being assessed.<sup>18</sup>

### **Developmental economics**

Developmental Economics is a sub-field of Economics which deals with economic aspects of the developmental process in relation to low income countries. Its focus is not only to improve economic growth, economic development and structural change, but also to improve the potential of the population through access to better health, and education. Developmental Economics takes into account social conditions to formulate better context-specific plans. This branch of Economics also incorporates theory-formulation and building to further its goals. This school took off with the ideas of mercantilists, neo-mercantilists and nationalists. According to Jeffrey D. Sachs, Andrew Mellinger and John Gallup, a nation's geographical location and topography also play a role in its success. The theory of comparative advantage, and the idea that nations should specialize in certain goods and services only, forms a part of developmental economics, and this idea was originated in 1817 by David Ricardo based on Adam Smith's theory of absolute advantage which he formulated in 1776. This theory is based on the Factor Endowment theory which states that different nations are endowed with different resources. This theory has however been criticized on pragmatic grounds within the import substitution industrialization theory of development economics, by Hans Singer and Raul Prebisch. Much has been written since Ricardo as commerce has evolved and cross-border trade has become more complicated. Today, trade policy tends to focus more on "competitive advantage" as

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<sup>18</sup> The growth delusion: The wealth and well-being of nations, David Pilling, Bloomsbury Publishing, 2018

opposed to "comparative advantage". This may refer to any attribute that may cause a set of organizations to outperform its competitors. Some competitive strategies were proposed by Michael Porter and others in the 1950's. Another notable theory in Developmental Economics is the linear stages of growth model developed by W W Rostow which divides growth into five distinct stages. These are the traditional society, pre-conditions for take-off, the take-off, the drive to maturity, and the age of high-mass consumption. <sup>19 20</sup>

## **Welfare economics**

Welfare economics is a branch of economics which uses microeconomic techniques to evaluate welfare and well-being at an aggregate or an economy-wide level, and is based on the work of Arthur Cecil Pigou who published an important book titled "Economics of Welfare" in 1920. It studies how the distribution of goods and resources can be effected to maximize human welfare and well-being, and seeks to formulate norms and criteria to this effect to achieve 'Social Welfare Maximization' and human satisfaction through objective approaches. As noted by Bentham, Social welfare stems from the greatest happiness of the greatest number, and is tied to the science and economics of happiness. However, the roots of Welfare Economics can be traced to theories such as consumer surplus which were first formulated by Dupuis in 1844. These were further refined by Alfred Marshall in his 'Principles of Economics' published in 1890, and is sometimes referred to as 'Old Welfare Economics'. Other theories of Welfare Economics have included Kador-Hicks Compensation theorem which deals with relative rises or decreases in incomes of different groups of individuals but was criticized for its limited practical value (This is a part of New Welfare Economics) and Hicks optimal outcome which deal with re-allocation of resources in a Welfare society, Scitovsky Double Criterion which is an important paradox in welfare economics, Social Welfare Function of Bergson and Samuelson which considers welfare for a given set of individual preferences and welfare rankings, and Amartya Sen's views on Social Welfare with link welfare with quality of life, and not just wealth.

Welfare economics is tied to the field of public economics, which is a study of how government may promote social welfare in different conditions. Welfare is a type of government support usually provided for a specific class of citizens in that society, usually to the elderly or disabled. In other societies, governments choose to provide minimum nutritional or income support. Sometimes social or merit goods such as healthcare and education are provided either free of cost, or at a subsidized rate. The idea of Social security dates back to the Bismarck government in Germany in 1899, though many nations now have social security systems of some kind. Welfare economics seeks to minimize deadweight loss, and maximize growth and efficiency with equity. Social Welfare may be paternalistic, where individual preferences count little. On

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<sup>19</sup> Developmental Economics: Debraj Ray, Princeton University Press, 1998

<sup>20</sup> Essentials of Developmental Economics, Second edition, J Edward Taylor, Travis JL

the other hand, as per the Paretian approach, Social Welfare is the aggregated total of the welfare of individuals. The third approach is based on interpersonal comparison of utility, and was developed by Bergsen and Samuelson in their Social Welfare function. The second and third approaches would ideally form the foundation of Anthropological Economics.

The field of Welfare economics is based on two fundamental theorems. The first theorem states that given certain assumptions, competitive markets produce (Pareto) efficient outcomes. The Pareto optimality theorem is one of the pillars of Welfare Economics, and deals with allocative efficiency. Pareto optimality or Pareto efficiency is a situation that cannot be modified so as to make any one individual better off without making any other individual worse off. This concept is named after Vilfredo Pareto, and Italian Engineer and economist, who first used this in studies of economic efficiency and income distribution. This does not necessarily result in an equal or a socially desirable allocation of resources, and a highly non-egalitarian society can also be Pareto efficient. In this connection, Pareto improvement is a new situation where some people may gain, but nobody will lose. The Pareto frontier, Pareto front or Pareto set is a set of all Pareto efficient allocations, which can also be depicted graphically.

The second states that given further restrictions, any Pareto efficient outcome can be supported as a competitive market equilibrium. Welfare economics is also related to social choice theory which combines individual opinions, preferences, interests or welfare to arrive at collective decisions related to social welfare. The American Economist Kenneth Arrow's Social Choice and Individual values (1951) and Arrow's Impossibility theorem which are used to convert individual rankings into social preferences are foundations of the Social Choice theory. This is also closely related to other concepts such as the Gibbard-Satterthwaite theorem, and May's theorem which are also social choice theorems. Optimum Social Security is the highest social security a society can attain in a practical sense under real-world constraints, and is sometimes known as the point of constrained bliss.

Early Classical economists argued that attempts to alleviate poverty through government interventions in the economy would lead to undesirable outcomes and would reduce total national income, and would interfere with market efficiencies and self-actualization of individuals. This view was however, opposed by the English economist John Stuart Mill who synthesized and rationalized the findings of earlier economists. While cautioning against undue interferences with the market mechanism, he argued that government policies when intelligently conceived and applied, could actually be directed towards reducing inequality. By the end of the nineteenth century, many political leaders in Europe and the USA such as Bismarck in Germany, Gladstone and Disraeli in Britain, followed by Franklin Roosevelt in the United States introduced early social welfare systems. This led to the rise of the welfare state, in which government takes steps to protect individuals against specific contingencies and to



guarantee people a minimum standard of living. State run welfare programs included public pensions, accident and sickness insurance, unemployment insurance, health insurance, food and housing for lower-income groups. Government policies like social security also made a big difference for the elderly and retired population, while programs like cash assistance, unemployment assistance and food stamps boosted the incomes of other low-income groups. Progressive income-tax systems, taxed high income earners at a higher rate than low incomes, reduced the degree of inequality to some extent. However, the share of total income going to the low income groups has remained stagnant or even declined in many countries. The share of income going to the richest groups has continued to increase in many countries. This suggests the need to re-evaluate social security programs from time to time in different contexts.<sup>21 22 23</sup>

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## Behavioural Economics

Behavioural economics studies the effects of psychological, emotional, cognitive, behavioural, social and cultural factors on the economic decision-making processes of individuals and institutions, and grew out of the work done by Daniel Kahneman and Amos Tversky in the 1960's on heuristics, biases paradigms, cognitive illusions or false illusions of certainty, framed past events, and decision-making under uncertainty. This approach contrasts markedly with earlier assumptions of logic, reasoning, and a rigid wiring of the brain, and discounts the idea of optimal outcomes even in the long-term. Thus, sub-optimal heuristics also lead to sub-optimal outcomes. Kahneman and Tversky also developed the Prospect theory in Economics to describe how individuals assess the loss or gain perspectives from a reference point (This approach assumes that losses are weighed more than gains due to emotional losses suffered from them). This challenged the Expected Utility theory developed by John Von Neumann and Oskar Morgenstern in the 1940's which suggested that Economic actors treated gains and losses as equal. Richard Thaler is known for his work on 'Mental accounting' which states that people think more in subjective and relative terms than in absolute terms. His work was published in 1980, and greatly contributed to the science of Behavioural Economics. Information cascades or informational cascades is another concept described in behavioural economics to describe how many people make the same decisions in a sequential fashion due to a herd mentality, and the observations of choices made by people earlier.<sup>25</sup>

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<sup>21</sup> Welfare Economics: Introduction and Development of Basic Concepts, YEW-KWANG NG, *Reader in Economics, Monash University, Australia*  
Revised edition, MacMillan

<sup>22</sup> Welfare Theory: History and Modern Results, Thomas Aronsson and Karl-Gustaf Lofgren, Department of Economics, Umea University ,  
Sweden, November 2007

<sup>23</sup> THEORETICAL FRAMEWORK OF PUBLIC POLICIES FOR WELFARE MAXIMIZATION, Dr.A.Kadir İPIK, Pamukkale University, FEAS Department of  
Public Finance, Denizli Turkey

<sup>24</sup> An introduction to Welfare Economics Dr Subhash, Redshine Publication Pvt Ltd, 2018

<sup>25</sup> The Behavioral Economics Guide 2017, Edited by Alain Samson and Cass Sunstein

Behavioural models integrate insights from psychology, neuroscience and microeconomic theory to decide how choices are made; these include both rational and irrational ones. Behavioural Economics traces decisions and decision errors to the design of the human mind which may consist of many mental processes, each operating by its own logic, and constrained by limited cognitive processing power and time. (Kurzban, 2011) Behavioural economists take the core principles of modern economics such as optimization and equilibrium, and build upon them to make them more empirically accurate. Thus, Behavioural Economics adds greater explanatory power to the science of Economics. (Camerer and Loewenstein 2004) Therefore, the terms Bounded Rationality (Decision making within cognitive constraints and limited information) and satisficing behaviour, i.e., pursuit of actions towards desirable outcomes are important. For example, many Americans and Europeans view Friday the thirteenth as unlucky, and choose not to make economic decisions on the day. This approach also draws on early interfaces between Economics and Psychology from the days of Classical Economics. Behavioural Economics also includes a study of heuristics or rules of thumb and stereotypes and biases driving decision-making and individual responses to events. Therefore, this approach also deals with over-confidence and false optimism, herd mentality, confirmation bias or selective data-picking, anchoring through reference points, hyperbolic discounting or present bias, time inconsistency, preference reversal over time, addictive behaviour, self-control problems, compulsive-obsessive behaviour, desire for control over one's own decisions, arational decisions and regretted rational decisions. Nobel prizes were eventually awarded to Daniel Kahneman, Robert J. Shiller and Richard Thaler for their role in advancing the science of Behavioural Economics, and their use of experimental psychology in the field of economics. Other contributors to Behavioural Economics include Harvey Leibenstein, Gerd Gigerenzer and Vernon Smith. Gary Becker and others argue that personal preferences are not formed independently, but in relation to others. Thus, personal behaviour is determined by social variables. Another related field of study is Identity Economics which seeks to integrate identity theory (A theory dealing with a multi-layered identity of the self) with different fields of Economics such as Behavioural Economics and Consumer behaviour. This field was founded in the 1990's by George A. Akerlof and Rachel E. Kranton.<sup>26 27 28 29 30</sup>

## Psychology of Economic Development

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<sup>26</sup> *BEHAVIORAL ECONOMICS IN THE CLASSROOM*, Principles of (Behavioral) Economics, By David Laibson and John A. List, *American Economic Review: Papers & Proceedings* 2015, 105(5): 385–390

<sup>27</sup> *An Introduction to Behavioral Economics*, 2nd EDITION, Nick Wilkinson & Matthias Klaes 2012

<sup>28</sup> *ECONOMICS AND IDENTITY* GEORGE A. AKERLOF AND RACHEL E. KRANTON, *THE QUARTERLY JOURNAL OF ECONOMICS*, August 200

<sup>29</sup> *Generic Identity Theory for the Twenty-first Century: Towards grand unified approaches in identity formation, identity transformation and identity dilution or neutralization*, Sujay Rao Mandavilli, *Elk Asia Pacific Journal of Social Sciences* Volume 5, Issue 3, 2019

<sup>30</sup> *Behavioural Economics*: Edward Cartwright, Routledge, London and New York, 2011

Eighteenth and Nineteenth century thinkers were already interested in the psychological basis of economic decision making, and early work dates as far back as to the times of Adam Smith who propounded some of his ideas in his work 'The theory of moral sentiments'. Jeremy Bentham and Francis Edgeworth also made important early contributions to the field. However, psychology was still considered to be a new and an unscientific field at that time. (Camerer, Loewenstein and Rabin, 2011). Another concept was that of 'bounded rationality', developed by Herbert Simon and others which stated that human minds and their workings need to be understood relative to the contexts in which they evolved. This idea was later built upon by Gerd Gigerenzer's 'fast and frugal heuristics' who stated that individuals built simple and intelligent algorithms for near-optimal inferences. (Gigerenzer & Goldstein, 1996) Conlisk also suggested that economists who did not consider bounded rationality algorithms were bad economists. Many psychologists have in the recent past have also tried to challenge mainstream economic models. Amos Tversky and Daniel Kahneman for example, developed the Prospect theory which showed that decisions are not always optimal, and are context-dependant. People therefore think in terms of expected utility relative to a reference point, rather than absolute outcomes.

Another related and overlapping field is Economic psychology which studies the psychological aspects behind economic phenomena and the inner working of people's decision making processes both at a micro and a macro-level. This approach challenges the notion of man as a rational human being (i.e. Homo Economicus) who always makes rational choices. This approach introduces concepts such as the Salience property of perception, which states that any analysis is based on value judgments and inner mental networks. Another concept is that of chains, which helps us connect dots, and make connections with the external world. This idea is also known as chains in perception. Anchoring, as proposed by George Kelly and others, refers to understanding things in relation to other concepts. These determine a person's worldviews, and impinge upon economic decisions as well. Integration of Psychology and Economics is of paramount importance because psychology examines human behaviour in a variety of life areas, and as such is amenable to the formulation of grand theories of human behaviour which can greatly impact Economics.<sup>31</sup>

### **Economics as a positive science**

According to JN Keynes, "A positive science may be defined as a body of systematized knowledge concerning what is, a normative science as a body of systematized knowledge relating to criteria of what ought to be, and concerned with the ideal as distinguished from the actual." Positive economics deals with 'what is', while Normative Economics deals with 'what

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<sup>31</sup> Identity Economics, how our identities shape our work, wages, and well-being, GEORGE A. AKERLOF AND RACHEL E. KRANTON, Princeton University Press

should be'. One of the objectives of a positive science is the establishment of scientific propositions, theories, laws and uniformities. On the other hand, in a Normative Science, ideals are established.

The idea of whether Economics should be classified as a normative science or a positive science was debated extensively by Robbins in his essay, "An essay on the nature and significance of Economic science". According to Robbins and others, Economic is wholly neutral to moral and ethical considerations. Thus, Economics cannot state that tobacco and alcohol are injurious to health, and must not be produced. Economists cannot also set standards for physical and mental health. Thus, there is a wide chasm between the positive and normative sciences and they are not on the same plane of discourse. Many other economists such as Friedman, Nassau Senior and J S Mill have also stated that economics should be construed as a positive science as it did not involve morals, ethics, and advocacy.

### **Economics as a normative science**

However, other economists such as Marshall, Pigou, Hawtrey, Frazer, and others do not consider economists to be a positive science only. They argue that as a social science, economics involves value judgments which cannot be always be empirically verified. Such thinkers argue that economics depends on social and political factors, and people's welfare and cultural and social preferences besides other aspects such as fairness and other ethical considerations should be factored into all considerations. Normative economics is also related to prescriptive economics which seeks to make prescriptions. In a normative science, importance may also be paid to the establishment of norms, and these should as far as possible, be context-specific.

### **Value judgments in Economics**

Value judgments refer to the conceptions people have about what is good or bad. These are often based on religious, political, cultural or philosophical values. Thus, normative economics also includes value judgments which may often be unscientific, and it may be necessary to tread a fine line here as ethical considerations cannot always form the basis of decision-making. However, the consensus approach is often adopted, and a paradigm may be good for a community if everyone accepts it as true. In other cases, a series of well-defined criteria may be adopted in the process of making value judgments. Some Economists like Robbins strongly argue that Economics cannot be normative in nature, as ethics are often judgmental. According to Robbins, "The role of an economist is more and more conceived as that of an expert, who can say what consequences are likely to follow certain actions, but who cannot judge as an economist, the desirability of the ends. Thus, Economics deals with ascertainable facts, unlike ethics which deals with values and obligations." However, according to many economists like

Paul Samuelson, Paul Streeten and AC Pigou, economics cannot be entirely purged of value judgments. This is because, the whole of Welfare economics involves creating norms for the welfare of society, and getting rid of norms would be akin to throwing the baby out with the bathwater.

We strongly argue that Economics should be normative in nature, and this should be one of the foundational principles of Anthropological Economics. This is not only because concepts such as sustainable development and ecological friendly development are most likely to be the norm in the future, but ethics are most likely to rule most decision-making and governmental policies, as governments move away from laissez-faire policies. Thirdly, the foundation of Anthropological economics is culture, and we strongly emphasize that cultural proclivities and preferences vetted against a broader socio-cultural perspective must form the basis of all economic planning and decision-making. However, a hunt must gradually made for global or universal values whenever this become practicable or feasible, and these must be studied along with local cultural norms.

### **Economic ethics**

Economic ethics combines economics and ethics uniting value judgments from both disciplines to predict, analyse and model economic phenomena. This school of thought originated from the works of the Greek philosopher Aristotle whose Nicomachean Ethics describes the connection between objective economic principles and the considerations of justice. The field of Economic ethics was heavily influenced by religion and the work of Theologians. The relationship between Economics and ethics appears to have been studied in various cultures. For example, ancient Indian Economic thought based on the Upanishads also centred on the relationship between the concepts of ethics, happiness and moral values. However, many economists do not differentiate between wants and needs, and much of capitalistic theory is morally neutral; for example, most economists do not consider the needs of a starving child any more important than that of a rich man who desires to own a Ferrari. Even though such economists may tread on slippery ground, there is no consensus on what constitutes morality either, and proponents of morals and ethics may run the risk of being labelled sanctimonious.

### **Basic definitions**

We now provide some basic definitions below from the point of view of Anthropological Economics, and these will be used throughout our paper. In addition, we may introduce new definitions from time to time in the remainder of the paper:

### **Economic activity**

An Economic activity may be defined as the activity of making, purchasing or selling goods or services for general use or public consumption. John Stuart Mill divided Economic activity into three primary categories, production, distribution and exchange. Economic activities have been known in virtually every economy since ancient times. Every economy therefore comprises of a large number of independent or interdependent economic activities, which may be major or minor ones. The most major economic activities form the bedrock and the basis of the economy as a whole. Economic Activity may also be classified into Primary or Core Economic Activity, Secondary Economic activity, and Tertiary Economic Activity, and these may be included or omitted in any analysis depending on nature of analysis being carried out, the level of detailing required or the types of economic models being formulated.

### **Economic actor**

An economic actor is a person who uses land, labour or capital, to shape an economy, usually with some vested interest. An economic actor may be an individual, business, a company, the government, or even the society as a whole. Economic actors may be divided into primary actors, secondary actors, and even tertiary actors, primary actors being the most important category for the understanding of the working of the economy.

### **Economic Goals and Economic Policy**

Economists usually recommend a high rate of economic growth and a high quantum of production of goods and services. However, this can be associated with bad externalities such as pollution, waste, depletion of natural resources and health problems. Most nations have established social goals involving economic issues. The type of goals a society adopts depends on the stage of economic development, system of government, societal norms, and political factors. Common economic goals include economic efficiency, economic growth, economic freedom, economic security, equitable distribution of income, a high level of employment, low inflation, and a favourable balance of trade. These must be balanced with ground realities and attainable targets formulated. Goals are often attained through policy measures and these includes several steps such as a clear statement of goals, evaluation of options, selection of course of action, implementation and evaluation of outcome.

### **Economic Efficiency**

Economic efficiency consists of three components, namely allocative Efficiency, technical or productive efficiency, and full employment. For an economy to be economically efficient, all three conditions must be satisfied. Allocative efficiency is concerned with how efficiently resources are allocated. In a perfectly competitive economy, markets usually allocate resources in an efficient manner. Allocative efficiency is measured using a concept known as Pareto

Optimality which is an allocation where no person can be made better off without inflicting harm on another. This does not however, necessarily translate into equality. Technical efficiency is the minimization of cost for a given level of output or maximization of output for a given level of cost. In other words, for an economic system to be efficient, each firm in each industry must be as technically efficient as possible, or at least working towards technical efficiency.

### **Core-goods versus non core-goods: An Anthropological analysis**

An Economic good is a marketable good or service which can command a price when sold to the general public or a specific set of customers. They usually satisfy human wants, and produce utility for their consumers. Thus, goods satisfy the principles of utility and transferability. Goods may be public goods such as air and water which may often be free, or private goods which are owned by individuals. A categorization is usually effected based on characteristics such as jointness of consumption, non-rivalrousness and non-excludability. Economic goods may also be categorized into core economic goods and non core economic goods. Core economic goods are economic goods that are crucial to the functioning of a particular economy, and for which there are no ready substitutes available. The definition of core goods and non-core or peripheral goods may vary from culture to culture, and it may be desirable in some circumstances to devise a rating scale from one to ten, the lower figures representing core goods.

### **Culture goods**

Culture goods may be goods that are core or intrinsic to the culture and for which there are no easy substitutes available in the culture. Culture goods are often consumed due to force of habit, often for long periods in time, and may be symbolically tied to the culture as a whole. Thus, there is a natural and instinctive preference for culture goods in a culture. Culture goods are often prominently represented in cultural artefacts or different elements of tradition the categorization of goods into culture goods and non-culture goods may vary from context to context, and a good that is core to a culture may not be core to another culture. Culture goods may have strong religious or symbolic value in a culture, but this is not always necessary. Demand for culture goods is usually non-elastic in nature, and in traditional cultures, most cultural activities revolve around the procurement and provisioning of such goods. Examples of culture goods are Yam in Polynesian cultures and the Ivory Coast, rice in South India and wheat in Punjab, though one culture may have many culture goods. Culture goods usually have no ready substitutes. Therefore, a move away from culture goods can only be accomplished with a great deal of difficulty. Culture goods usually provide some economic benefit, and cultural artefacts providing minimal or no economic utility may be defined as peripheral economic goods, and the latter may be represented by such elements such as music and art. Thus, culture

goods may also additionally be classified into core culture goods and peripheral culture goods. Core Culture goods may also additionally be classified into Cultural Essentials and Cultural non-essentials, since Culture goods may not necessarily comprise of essentials alone, and may also include intrinsic, yet less important goods. For example, some Anthropological Economists may wish to classify Automobiles and Gasoline as Culture goods in the American context given their strong association with American culture, but group them under the category of non-essentials. Another option is to rate goods on a scale of one to ten, one being culture goods, and ten being non-culture goods.

Non-culture goods, on the other hand are usually extrinsic to a culture, and are usually external in origin. A culture may adopt non-culture goods over a protracted period in time, and usually after a prolonged period of experimentation and adjustment. Some non-culture goods may originate internally, and often in such a case, the period of adjustment becomes easier. However, there can be countless exceptions to every rule, and econoethnography is perhaps the only way to assess ground realities in a wide variety of situations. Some cultures may exhibit hostility for non-culture goods, and some cultures may also possess taboo goods. Example of taboo goods can be beef in Hinduism, all forms of meat in Jainism, and alcohol, pork and non-halal goods in Islamic cultures. Thus, taboo goods are usually stigmatized, either strongly or explicitly, or in a more subdued fashion.

There are many interesting examples of Culture goods. For example, yam plays a very important role among the Trobrianders. The staple food is often yam, breadfruit and bananas. Yam also has great symbolic value. At the time of marriage, the bride's mother often cooks yam for the family, and no ritual is complete without this. A woman and her husband receive yams from her brother every year. By giving yams each year to his sister, a man secures his woman's from someone in another matrilineage for his own matrilineage. Yam also plays a major role in the Ivory coast, and is a staple food in the area. As the French Anthropologist Claude Meillassoux points out, it is not a crop that the husband can freely sell and spend the proceeds of. Yams are meant for the basic sustenance of the household. They can be sold, but only to pay for school fees or medical care for the children, not to buy fancy goods. When there is a good year for yams, the family does consume more yams, but spending on education and other useful goods also increases. Thus, a good harvest of yam ensures that everyone in the family is properly fed and educated. The Ashanti Yam festival is a major annual celebration for the Ashanti people of Ghana. This festival marks the first harvest of yams during the autumn season, and is observed for five days starting from a Tuesday. Offerings are made to ancestral Gods, and festivities are observed. Thus, the humble yam forms the basis of the most important festival for the Ashanti tribe.



Identifying Culture goods can be of great value in Anthropological economics as it can greatly assist in the process of economic planning. This is because culture goods are readily associated with cultural processes and skillsets that produce those goods. Furthermore, cultural alienation takes place only slowly in most cases; thus one culture can have many culture goods which can be ordered and ranked, in addition to several non-culture goods. Another alternative approach would be to classify goods into primary goods and secondary goods in the context of a culture; many culture goods would be primary goods, and a few secondary.

### **Subsistence goods**

Subsistence goods refer to those goods which are produced by a subsistence economy. These refer to goods that are produced to keep inhabitants of a country barely afloat. Subsistence goods usually comprise most or all of core cultural goods plus a small number of other goods. Examples of Subsistence goods are various types of fish consumed by Cree Indians. These may or may not represent culture goods in that region. A subsistence economy is an economy directed towards the production of basic needs such as food, clothing and shelter rather than more advanced goods. Most primitive societies are classified as subsistence societies. Subsistence societies usually evolve into more advanced societies over times, though this process may vary in different contexts. This process is now accelerating in many parts of the world due to the process of globalization.

### **Anthropological goods**

We propose that the term Anthropological Goods be used to cover a wide variety of goods that would play a crucial role in most human civilization in some fundamental way. Thus, Anthropological goods would be a superset of Culture goods, and would not be culture specific. Anthropological goods, from our definition, would cover most goods except those goods that are not normally factored into any economic analysis. Examples of such goods would be elitist goods, fancy goods, and high-end luxury goods or services examples of which can be luxury cars and art or paintings. Thus, Anthropological goods would comprise subsistence goods plus goods which are widely consumed by most sections of the population.

### **Population**

A population is a set of similar items or events which is used to corroborate and event or an experiment. A subset of a population which shares one or more common properties is referred to a sub-population. From the standpoint of Anthropological Economics, populations refer to human populations resident in a country or a territory, possessing common cultural or economic characteristics.

Populations may be sub-divided into socio-cultural groups which may in turn be sub-divided into socio-economic groups.

### **Socio-cultural groups**

The identification of Socio-cultural groups forms the starting point of our study. We propose that populations may be first divided into socio-cultural groups. A sociocultural group is one which is defined after a consideration of both social and cultural factors, and normally takes into consideration traditions, customs, lifestyles, beliefs, habits and cultural patterns present in a group. It also seeks to understand human behaviour and mind-orientation from a socio-cultural perspective, and understand how these impact educational, employment and economic factors as well. This concept is also related to the idea of a sociocultural system which is a human population viewed in its ecological context and as a subsystem of a larger ecological system comprising interrelated cultures. A sociocultural system typically comprises of society, culture, and allied systems. In 1979, Marvin Harris proposed a universal structure of sociocultural systems. He mentioned infrastructure (production and population), structure (which includes political organizations, hierarchies, castes etc.), and superstructure (which includes beliefs, values, norms). The idea is also related to Systems theory which originated in the works of Bertalanffy and others, and were extended to various domains in social sciences by Talcott Parsons, Roy Rappaport, Niklas Luhmann and others. It would be a myth to claim that this kind of an analysis would hold good for developing countries alone. This paradigm could be fruitfully applied even in multi-cultural societies such as the USA where different cultural groups such as whites, blacks and Hispanics exist, and in other contexts as well.

### **Socio-economic groups**

A socio-economic group is a group emerging from the interaction of social and economic factors. A socioeconomic class is a class which is determined taking into account, a group's economic and social status in relation to other groups. Characteristics that determine socioeconomic status include employment, education, and income. Sometimes, age and gender are also factored into an analysis, but there are no rigid rules, and the requirements of different studies are often the sole determining factors for categorization. Thus, categorizations and interpretations may vary widely from study to study, and this must be actually encouraged subject to potential problems that may be encountered in cross-sectional and cross-cultural comparisons.

From our perspective, Socio-cultural groups may then be broken up into socio-economic group such that each socio-cultural group comprises one or more socio-economic groups. Thus, the entire population is broken up into socio-economic groups for the purposes of our study.

Thus, we strongly believe that classification of populations into socio-cultural groups and socio-economic groups must be the starting point in any meaningful analysis in Anthropological economics. This kind of analysis may again be bounded or unbounded, as these can be aggregated either at a global level or the level of a political unit such as a country. We expect that the latter would be more commonly used in most studies. At times, an intersectional analysis may be carried out where a sociocultural group straddles different political entities. Examples of these could be Baluchi speakers who are present in both Pakistan and Iran, and Kashmiri groups who are present in both Pakistan and India. Sociocultural groups and socioeconomic groups must also be defined as granularly as possible, for a better and a more meaningful analysis, though aggregation may be attempted at times. E.g., aggregation of Nicobarese tribes into one sociocultural unit instead of studying them separately.

### **Occupation groups within Socio-economic groups**

We may also define Occupational groups within Socio-economic groups. These groups typically engage in a primary occupation or a set of closely inter-related occupations, and are characterized by similar educational attainments and a relative homogeneity of skills. However, occupational mobility may occur, at varying rates, and this would be a function of the culture to accept and adapt to change. In most cases, socioeconomic groups must be associated with primary or core economic activities, secondary economic activities, or peripheral economic activities. Wherever, classifications cannot be readily or easily be made, fieldwork may form the basis for classifications; thus, preliminary classifications and hierarchies may be refined through fieldwork.

### **Creative classes**

Several indices have been developed from time to time to measure the creative component of cultures. Prominent examples include the Global Creativity Index or CGI developed by Roger Martin and Richard Florida which ranks countries based on creativity, technology, talent and tolerance. Attempts have also been made to assess the “Creative Class” in different countries, which is a class that plays a major role in driving economic development of a country. Such classes are bound to be more prominent in developed countries, but many developing countries now have middle classes. This is akin to an intellectual class, but a creative class is more directly translatable to the economic growth in the country. In developing countries and least developed countries, creativity is often still low, due to low levels of education, out-dated or outmoded education systems, poor teaching techniques, poverty, backward ideologies and an over-sized role of religion. This is also associated with concepts such as the brain drain or the flight of talent, the reverse brain drain or the return of talent, and the flight of capital due to the loss of talent.

## **Intellectual classes**

An intellectual is a person who engages in intellectual endeavours such as research, critical thinking and self-reflection about society. Some intellectuals present abstract, philosophical, and impractical ideas, while some others actively strive for the betterment of society. The intellectual and the scholarly classes are often tightly inter-related: an intellectual may be a professor guiding the production of scholarship, or may work in industry or a prominent institution.

Intellectuals typically engage in:

1. Conceptualization and development of abstract ideas and theories;
2. Producing intellectual and scientific capital in various fields or
3. Artistic or creative output which may contribute to the soft power of a nation.

Intellectuals often propose practical solutions for public issues and gain authority and respectability in society. Intellectual virtues are qualities of mind and character that promote intellectual creativity, critical thinking, commitment to the welfare of society and the pursuit of truth. The strength of the intellectual class varies widely from society to society. In most countries, however, the intellectual class is weak and is often influenced by dogma, ideology or political beliefs. The strength of the Intellectual class in a society is measured through Intellectual Capital. This concept first evolved in the context of organizations, but was subsequently extended to include cultures and nations.

## **Entrepreneurial classes**

Entrepreneurship may be defined as the ability of a culture to foster, nurture and generate entrepreneurs. Entrepreneurship is the ability found and successfully run a business enterprise. This often requires leadership ability, business acumen, technical knowhow, and marketing ability which may be found in different degrees in different cultures. Entrepreneurship is characterized by risk-taking, innovation, visionary leadership, and technical expertise. On the other hand, a Capitalist Class is a small group of individuals in a country which owns and controls the bulk of private corporate wealth, and generates employment for a large percentage of the population.

## **Human Capital**

Human capital refers to the intangible skills, knowledge, talent, intelligence and experience possessed by an individual or population, sometimes studied in relation to a culture. It also refers to the factors of production arising from human capital, which are used to create goods, services and ideas. Human capital is also often measured in terms of creativity, pragmatism and resilience. It can also be bolstered by paying adequate attention to health and education. The

idea of human capital can be traced back to the time of Adam Smith, but modern ideas of Human capital were popularized by American Economist Gary Becker, Jacob Mincer, Theodore Schultz and others. Gary Becker merged sociology and Economics, showing how sociological factors influence economic behaviour. He also defined Human capital as “activities that influence future monetary and psychic income by increasing resources in people.” (Becker 1994) his philosophy can be summed up in one sentence, “Economy is the art of making the most of life.” Human Capital theorists have always argued that an adequate thrust on human capital could alone ensure long-term economic growth, and that return on investment on Human capital could also be measured through robust economic growth. On the other hand, Karl Marx proposed another interpretation of Human capital called labour power wherein workers sold their labour to capitalists and were in turn exploited. A related field of study is labour economics. This field seeks to understand the functioning and the dynamics of the market for different types of labour that go into the making of a successful economy through a combination of microeconomic and macroeconomic techniques.

Human capital is attempted to be bolstered through the science of Human Development which is a science that seeks to understand how different people’s latent capabilities and accomplishments remain at a certain level or change with the passage of time. It is also related to the Capabilities approach. According to the UNDP, “Human development is the process of enlarging people’s choices, which allow them to lead a long and healthy life, to be educated, to enjoy a decent standard of living, as well as political freedom, other guaranteed human rights, and ingredients of self-respect.” Other Economists such as Paul Romer have proposed innovation-led Economic growth models, and endogenous growth models (as opposed to exogenous growth models such as the Harrod-Domar model and the Solow-Swan model which base growth on savings and technological progress) which focus on innovation and creativity, and propose macroeconomic models based on microeconomic foundations. Models such as the Solow-Swan model predict that poor countries will catch up with rich countries on the basis of savings rate (conditional convergence), but this approach must be contested from an endogenous perspective.

In 2018, the World Bank published the Human Capital Index or HCI, and attempted to rank nations on the basis of Human Capital Utilization. As per this ranking, most European and many Asian nations are ranked at the top, while most Sub-Saharan nations, and many other Asian nations are ranked at the bottom. Many other approaches for measuring Human capital are proposed from time to time.

From our perspective, Human potential should remain relatively constant everywhere, but is utilization would depend on social, cultural, religious, economic and historical to state a few. Thus, Human capital utilization would vary widely from region to region, and the onus would be

on governments to ensure that Human capital is utilized to the fullest extent possible, and human energies are channelized for the greater good.

### **Cultural capital**

In sociology, cultural capital comprises the culturally-derived assets of a person which may include his education, intellect, style of speech, mannerisms and interpersonal skills that complement his other core skills and that accelerate social mobility in a highly stratified and differentiated society. Cultural capital therefore includes the accumulated self-learned or culturally-transmitted knowledge that bestows social status and power in a given society. This definition appears to be somewhat limited and Euro-centric by our standards, and cultural capital should also at a broad level include those differentiating cultural factors that promote sustained and wide-ranging economic growth. In "Cultural Reproduction and Social Reproduction" (1977), Pierre Bourdieu and Jean-Claude Passeron presented the idea of cultural capital to explain differences among the levels of performance and academic achievement of children within the educational system of France in the 1960s; and further developed the concept in the essay "The Forms of Capital" (1985) and in the book *The State Nobility: Elite Schools in the Field of Power* (1996).

According to Bourdieu, there are three types of cultural capital: (i) Embodied capital; (ii) Objectified capital; and (iii) Institutionalised capital. Embodied cultural capital comprises the knowledge that is consciously acquired or passively inherited, by socialization to culture and cultural tradition. Objectified cultural capital comprises the person's cultural property that can be sold, transferred or transmitted for economic profit. Institutionalized cultural capital comprises an institution's formal recognition of a person's cultural capital, usually through academic qualifications or professional memberships. A well-developed corporate culture also may give expression to an individual's cultural capital, and facilitate the conversion of cultural capital into economic capital.

### **Social capital**

Social capital refers to the effective functioning of social groups through well-developed interpersonal relationships, evolving from shared values, a common sense of identity, mutual trust, cooperation, and reciprocity. Social capital is a measure of the value of resources, including both tangible assets (This may include public spaces and private property) and intangible assets (for example, people), and its function in promoting social good.

Social capital has been used to explain the optimal performance of diverse groups, the value derived from strategic and mutually beneficial inter-community alliances, and the healthy growth and development of communities.

The power of community governance has been stressed by many philosophers from antiquity to the 18th century, from Aristotle to Thomas Aquinas and Edmund Burke (Bowles and Gintis, 2002). This idea was criticized at the end of the eighteenth century, with the development of the concept of Homo Economicus and the 'rational choice theory'. Therefore, the importance of old institutions and traditional relationships was called into question in a rapidly changing world. (Tonnies 1887) (Durkheim 1893) (Simmel, 1905) (Weber 1946). In the first half of the 19th century, Alexis de Tocqueville made observations about American life that appeared to ratify the concepts of social capital. He observed that Americans still met at gatherings to discuss various issues concerning their affairs, and this often promoted social good.

Theories of social structure cannot be understood without understanding the concepts of functionalism. The word function from Latin *fungi*, or *functio* means to effect, perform or execute. The roots of functionalism lie in the philosophies of the great Greek thinkers Aristotle and Plato. An interesting idea of this period was the idea of *telos* (later reproduced in Adam Smith's works) which means that the end purpose of things is often the cause. August Comte who had formulated the concept of positivism, also was among the first to liken society to an organism. Emile Durkheim also described what he called 'sociological explanations'. This also comprised causal-historical explanations where historical sources were examined in the analysis of an event, and a purely functional analysis where the contribution each part makes to the whole was studied. Thus, function could be defined as the contribution each part made for the maintenance of a whole.

Thus, society or culture consists of parts such as institutions and groups which are interconnected, interrelated and interdependent. Each part performs its own function, and makes its own contribution to the culture as a whole, and functions in relation to other parts of the culture. A change in one part brings about changes in other parts, because all parts are inter-connected. The entire society is greater than the sum of its parts and the law of synergies apply.

However, the school of functionalism was created by Radcliffe-Brown and Bronislaw Malinowski. According to Radcliffe-Brown, each society was a functionally inter-related system. However, Radcliffe Brown did not use the word 'functionalism' like Malinowski did, and felt that such terms imparted rigidity to concepts. According to Radcliffe Brown, there was a distinction between an organism and society. An organism can be studied even when its parts have stopped working. Thus, the structure of an organism can be studied separately from its function, which is not the case with society. Radcliffe Brown also laid a great emphasis on structural continuity of society, and a necessary integration of parts or a minimum solidarity. Unlike Radcliffe Brown, Malinowski propagated the term 'functionalism' with a great degree of enthusiasm. According to him, all anthropological facts could be explained with respect to the role played by them in society. He also believed that every custom, material object, idea and

belief played some role in society. There were fundamental differences between the two approaches. While Malinowski took the individual as the starting point, Radcliffe Brown took society as the starting point of an analysis. According to Malinowski, there were three levels: the biological, the social structural and the symbolic, where the biological system was placed at the bottom, and the symbolic system at the top. Each of these levels has a set of needs that must be satisfied for the survival of an individual. Thus, a society's basic needs determined its cultural responses. It is on this survival, that the survival of larger entities such as groups and institutions is dependant. The concept of culture was crucial to Malinowski, but less important to Radcliffe Brown.

Talcott Parsons and Robert K. Merton are referred to as arch-functionalists. They abandoned the term 'structural functionalism' used by their predecessors. They spoke about stability and change with respect to the study of systems, and believed that their approach was more accommodating towards change. It is also referred to a 'grand theory', an idea Merton was not comfortable with. Parson's functionalism is also known as the AGIL Model, or the four-function paradigm. As per the AGIL Model, A stood for adaptation, G for Goal attainment, I for Integration and L for Latency. These could be studied at the general level of an Organism, Personality, Culture and Social System. Different functions studied in the Social system could include economy, Polity, Fiduciary System, and Societal Community.

More recent approaches have included Neo-functionalism, an idea which was developed in Germany by Niklas Luhmann and Jurgen Habermas, and sought broaden functionalism's intellectual horizons while retaining its intellectual core. Neo-functionalism advocated an open and a pluralistic description of society, with in-built diversity, and differentiation driving social change. These ideas were also supported in the USA by Sociologist Jeffrey Alexander and his collaborator Paul Colomy.

The term 'structure' has been applied to human societies since the nineteenth century. Before that, it was much more widely used in fields such as biology. According to the Oxford Advanced Learners dictionary, the term structure refers to the way something is organized, built or put together, or something which is represented by a system, pattern or procedure. It may also comprise a thing comprising several parts put together in a particular way. Thus, there is always an interconnectedness of parts, with each part brought together in a series of pre-specified relationships. Thus, as pointed out by Herbert Spencer and others, an analogy can always be drawn to organic systems, and both closely resemble each other.

Radcliffe Brown used the theory of Social structure for the first time in 1914, while delivering while delivering his presidential address to the Royal Anthropological Institute of Great Britain. He also distinguished between the concept of an individual and a person. An individual keeps carrying out a multitude of physiological and psychological functions as long as he is alive. A



person on the other hand fosters a large number of social relationships. Thus, an individual is also a 'social personality.' A society is also not a haphazard collection of persons but an organized system where norms and values control relationships between persons. Thus, there is a vitality and dynamism in social structure: there is constant change, but underlying principles remain the same. Other Anthropologists like George Peter Murdock rejected the idea of pure functionalism and tried to adopt cross cultural comparisons by combining historical, functional, psychological and statistical methods.

Controversial and debatable contributions to the idea of Social Structure were also made by Claude Levi Strauss, and these may seem somewhat irrelevant from the point of view of Anthropological Economics on the face of it. However, this may not be the case. According to him, social processes and structures are an outcome of mental processes. Strauss also distinguishes between social structure and social relations. Social structure refers to the relationships between people, empirical and observable. Thus, they may be described as the 'raw data of human experience.' According to Strauss, social structures and the social relations can be used to model social life. Thus, the goal of Social Anthropology is to identify social structures and formal relations between individuals, through the use of mathematical tools. Strauss also spoke about mechanical models and statistical models. Mechanical models are models which are on the same scale as the phenomenon. However, when models are on a smaller scale, they are called statistical models. In case of statistical models, average values and thresholds may be used.

S F Nadel developed the theory of Social Structure in his book, "The theory of Social Structure". His approach was to merge a functionalist perspective into a structuralist perspective. According to Nadel, the components of social structure are the roles and the pattern or design of interconnected roles constitutes the social structure of society. According to him, "We arrive at the structure of a society through abstracting from the concrete population and its behaviour the pattern or network (or 'system') of relationships obtaining between actors in their capacity of playing roles relative to one other." According to Nadel, there are three elements, (i) A group of people (ii) institutionalized rules according to which members of the group interact (iii) An institutionalized pattern or expression of these interactions. According to Nadel, there are three dichotomies to be resolved for a better understanding. (i) Structure as opposed to function (ii) structure as opposed to qualitative character (iii) structure as opposed to process. Unless these dichotomies were solved, social structure could not be understood.

Edmund Leach also made significant contributions to the concept of social structure. There are significant differences between Edmund Leach's and Claude Levi Strauss's ideas on social structure. Leach's approach focussed on applying structuralism to understand local or regional structures. Leach also divides the social universe into different epistemological categories: the

raw data of social experience and the models that are built from it. Leach also differentiates between mechanical and statistical models, but he calls mechanical models jural rules, and statistical models, statistical norms..

Raymond Firth also was opposed to synchronic functionalism and like Edmund Leach dealt with dynamic or diachronic functionalism. Firth was also concerned with individuals and the choices they make. Firth also emphasizes the necessity to distinguish between social structure and social organization, where the former is more abstract, and the latter more concrete. Another important contributor to social structure is Rodney Needham who analysed African Kinship groups. According to Fortes, the social structure should be thought of in terms of organization, and that social structure could be evaluated in terms of the local organization. Evans Pritchard also studied the elements of Nuer society in 1940, and emphasized the need to study social structure in terms of groups. It could also be understood in terms of constant and consistent relations between groups. Talcott Parsons, on the other hand, emphasized the importance of roles in defining social structure and the problem of how to relate the static concept of structure to the dynamic aspects of social change. According to Parsons, social structure is a term applied to the particular arrangement of interrelated institutions, agencies and social patterns as well as the roles, which each person assumes in the group. Per his view, customs, traditions and conventions of society leads to the formation of agencies and institutions. Emile Durkheim also treated society like an organism, and opined that society tends to exist through fulfilment of essential needs. Rodney Needham was one of the leading British anthropologists of his time, and brought structuralism to England. In a series of important papers, he brought the power of structuralism through an analysis of kinship structures. He produced very comprehensive work on classification, cognitive universals, indigenous psychologies, and kinship theory.

Social structure has also been extensively researched by Ethnographers. For example, David M. Schneider has extensively studied American kinship, just like Meyer Fortes studied Tallensi kinship, and has brought out the specifics of American kinship- these include fluidity, dynamism and differentiation. Work has also been done on the Kashmiri pundits by TN Madan (Kinship and family structures), and on polyandry in the Himalayas by D N Majumdar. Margaret Trawick has studied marriage and alliance patterns in a Tamil family in Southern India, just as Andre Beteille and Karin Kapadia studied class and caste in Tamilnadu.

However, comprehensive analyses of economic structures and socio-economic structures from around the world are lacking, particularly comparative studies of different systems.

Social cohesion can be found to varying degrees in different societies. It is considered to be largely absent in modern capitalistic societies where individualism and notions of individual liberty reign supreme. Social cohesion is also believed to be in decline in most modernizing

societies as they follow the path of developed western countries. At the other end of the spectrum, social cohesion manifests itself quite visibly in most primitive societies, the Sentinelese of Andaman and Nicobar Islands being a case in point. Another case in point is the Nuer society. The Nuer are a confederation of tribes who live in South Sudan and Western Ethiopia, and refer to themselves as Nath or Ran. They are members of a Nilotic cultural and linguistic group which includes the Luo and Turkana of Kenya, the Karimijong of Uganda etc. At the beginning of the rainy season, the food supplies are insufficient to meet the Nuers' needs. Therefore, the members of the tribe share food with each another, particularly among members of neighbouring homesteads and villages displaying a unique economic solidarity. All economic activities such as hunting, gathering and fishing become joint in nature, and the entire community is transformed into a co-operative group.

The institution of Marriage is also used in interesting ways to spread risk. Families in India use marriage as a way to diversify the "risk portfolio" of their families. When a woman moves to her in-laws' village after her marriage, she creates a link between her natal household and the conjugal household, and the two families assist each other in times of trouble.

Endogamy is the practice of marrying within a community, class, clan or village. Therefore, Endogamy may be defined either at a village, class, or a clan level based on social norms. These may be observed very strictly in many communities. Likewise, consanguineous marriages may be allowed or disallowed as per custom. Incest is almost universally prohibited across cultures. In India, the concept of Endogamy is further compounded by the caste system which is not only found among Hindus, but also Muslims and Christians as well. People are broadly divided into four categories, the Brahmins, Vaishyas, Kshatriyas and Shudras, plus Achuts or untouchables. However, in the real world, Jati, which is an extended kin group comprising blood and marriage relationships is the effective local unit. On the other hand, Exogamy is the practice of marrying outside a community, class, clan or village. Therefore, Endogamy may be defined either at a village, class, or a clan level based on social norms. These may be observed very strictly in many communities. The rules of exogamy within a Jati are operative in the form of Gotra exogamy and Sapinda exogamy. The Gotra exogamy is common to most Hindus, while Sapinda exogamy is prevalent in North India. Both these define rules for eligibility for marriage. For example, some years ago a person could not marry someone who had a direct male ancestor in the father's line up to the seventh ascending generation and the fifth ascending generation in the mother's line. Brahmin men always married Brahmin women; this rule was however relaxed in ancient times for secondary wives. Other cultures have unique patterns of kinship. For the Tallensi of Ghana of West Africa, for example, the concept of kinship subsumes all kinds of relationships such as agnatic, cognatic, affinal and bilineal, and unique concepts include the maximal lineage, the clan, and the minimal lineage concept. The Tallensi also have the concept of homesteads based on kinship; the same is also found among the Kashmiri Pundits (Gare or

household, chulah or hearth, kotamb or extended family, and kol or patrilineage), and in Coorg in Southern India.

Most poor people living in villages or remote regions have access to an extensive network of people whom they can call on in times of trouble. If those who are doing well help those who are in difficulty, others will help them out too. Thus, in all these cases, social cohesion is culturally institutionalized. In Nigerian villages, villagers often help each other on an individual basis, instead of collective action. In India and other parts of the world, Self-help groups are now becoming increasingly common, and members help themselves out in times of need. In other parts of the world such as Africa, Rotating Savings and Credit organizations are more common, and the two share a common underlying theme.

Social cohesion is also assessed through the use of Common property resources. The most commonly-cited Common property resources are grazing lands, village ponds, forest produce etc. These are used for the welfare of the entire community, and are not held by an individual or a group of individuals. A definition of CPR that is closely related to Economics was provided by Kadekodi, "A property on which well-defined collective claims by an exclusive group are established, the use of resources is subtractive, having the characteristics of public goods such as indivisibility, shall be termed as common property resources." (Kadekodi, 2004) Ostram and others state that such resources could be owned by the state, and 'use rights' alone, and not collective ownership could be extended to communities in need. Common property resources are often managed through collective action, and individual management is rare. (Chopra 1990) Garret Hardin's 1968 article, "Tragedy of the Commons" argues that common property tends to be overused and resources can be rapidly depleted. In 1990, Elinor Ostrom provided a set of suitable design principles for CPR management to create design principles for future resource management projects. A flaw of CPR approaches is that they are not often linked with external factors such as macro-governance and political development. Social cohesion also manifests itself through collective action and collective movements such as the Chipko movement and the Narmada Bachao Andolan, and the strength of such movements is asymmetric across cultures.

Another interesting concept is that of "Eminent domain"; this is a redistribution of private property rights through the authority of some organization. The individual is required to give up their claims to private property by an authority. Usually the process of eminent domain is legitimized by government, religion or some other authority, and this represents a form of an externally-enforced social cohesion.

There are different types of political structures, and these correspond to social structures in different ways. According to Gary P Ferraro, (1992) the key characteristics of differentiation include (a) The extent to which political institutions are distinct from other aspects of social

structure such as kinship and economic structures. (b) The extent to which authority is concentrated in specific roles (c) The level of political integration in the group.

For example, Anthropologists have classified societies into different categories such as Band societies, tribal societies, chiefdoms, and state societies. Band societies are the least complex form of societies which are characterized by small groups of between 30 to 50 people, and are relatively egalitarian. Tribal political organizations are predominantly associated with food production, and are relatively larger than band societies. These may be based on clans and other sub-units. Segmentary lineage system is another form of tribal association where individuals of different genealogical levels integrate to form a bigger unit in opposition to another such unit. In Chiefdoms, a number of local communities are integrated into more formal political units, but the political authority usually rests with a single individual, acting with or without an advisory council. State societies have much more complex forms of socio-cultural integration. These also have stratification with unequal access to resources. Such societies in turn evolved into more complex societies with a high degree of technological prowess and specialization.

Societies have also passed through different stages over the ages to reach their present state. Food gathering and hunting is said to be the oldest type of economic activity, and its history may span around two million years. Agriculture originated with the Neolithic revolution ten thousand years ago. Industrial economies have been in existence only for the past four hundred years. Such forms of economic activity have included division of labour, organization of labour, customary ways of distribution of goods, and simple ad-hoc forms of organization structures and decision-making. Such organizations are usually primitive and culturally-defined with use of simple technology. Ownership of property is usually communal, and there is some division of labour based on criteria such as age and sex. The major types of distribution of goods are reciprocity, redistribution and market. Some societies have culture specific practices such as horticulture, Jhum, or slash and burn cultivation and the Jajmani system. However, almost all primitive systems involve production in some form (which involves food collection and food production), distribution and exchange, and utilization or consumption.

Early political units eventually evolved into state and stateless societies. Primitive states were also often associated with territory which was usually loosely defined with possible overlap. Protection of territory, carrying out rituals also entailed structured economic and political activity. This would have led to sharp differences in wealth, statuses and privileges over time. Examples of primitive states were the Zulu, the Ngwato, the Bemba, the Banyankole and the Kede. On the other hand, stateless societies have no great differences between the rank, status or wealth of their members. Examples of the latter include Andamanese groups such as the Jarawa and the Sentinelese.

Another concept related to Social cohesion which is Social learning and refers to a concept in sociology which describes how social learning takes place by observing and imitating others. It proposes that learning is a cognitive process that takes place in a social context through observation and instruction. Social Learning theories were developed from B F Skinner's behaviourist theories. Other Social learning theories were developed by Clark Lewis Hull, Neil Miller, and John Dollard at the Yale University. Later work by Julian B. Rotter and others, proposed that learning occurred as a result of holistic interaction between the individual and the environment. Another related concept is Social evolution which is a field of sociology that studies evolution of social systems, and interactions between individual and societies, and their evolution and change over a period in time.

### **Socio-cultural and Socio-economic differentiators**

Socio-cultural and socio-economic differentials refer to ingrained differences between socio-cultural and socio-economic groups. These may be due to several factors such as differences in educational attainments, social and cultural differentials, enculturation patterns etc. these are captured as endogenous and exogenous variables, and the root cause for the differentials assessed. Anthropological Economics focuses primarily on social, cultural and anthropological causes for such differentials. These differentiators can be productively and profitably be used in economic analysis and economic planning. There are many different examples that readily spring to mind; for example, the Gujarati or Marwari community is known for its entrepreneurship and its enterprise; something that tribals in the Indian state of Odisha are not known for. On the other hand, these entrepreneurs are often still associated only with their low-end entrepreneurship. High-end business involving manufacturing of high-end technology products or professionally-run businesses have thus far eluded them; likewise, the relative economic backwardness of India vis-à-vis China may also be attributed to a wide variety of cultural factors; thus, remediation strategies and roadmap-building must be carried out along with a socio-cultural or a socio-economic SWOT (or a Strength Weakness Opportunity Threat) analysis, and must be based on their latent cultural strength. This can be carried out using the existing core strength- complementary strength model. For tribal regions of Odisha, the nature of economic planning must be different. Industries using natural resources may be promoted, but anthropological and environmental damage must always be assessed, and the cons taken into consideration as well. These differentiators could be driven by a wide variety of factors, a short list of which is as follows:

1. Differences in fundamental cultural or societal orientations
2. Attitudinal differences towards life and money
3. Differences in motivational factors
4. Differences in preferred occupational patterns

5. Differences in consumption patterns
6. Differences in enculturation patterns
7. Differences in value systems
8. Differences in saving and investment patterns (E.g. types of houses purchased, etc.)
9. Social differentiators and presence or absence of social hierarchies
10. Environmental differentials, and factor endowments

Thus, any model should capitalize on strengths and differentiators, and the following must be assessed at the very least:

1. Socio-cultural or socio-economic advantage
2. Comparative or relative or socio-cultural advantage
3. Socio-cultural or socio-economic neutrality where no major strengths can be identified
4. Assessing economic activities that are socially and culturally neutral
5. Minimization of Socio-cultural disadvantage

Cultural and non-cultural factors must be factored together in any Economic strategy formulation, and any assessment should take into account the following:

1. Expected outcomes of strategy
2. Perceived strengths of strategy
3. Perceived weaknesses of strategy
4. Risks of strategy
5. Expected lost opportunities from strategy
6. Cultural Compatibility assessment of strategy

Economists like David Ricardo have spoken all along about 'Comparative advantage' which is the ability of a country to produce goods at a lower cost than other countries. Such concepts have been extended by other Economists such as Gottfried Haberler, (Opportunity Cost model), Eli Hecksher and Bertil Ohlin (Hecksher Ohlin theory of International trade) etc. On the other hand, the Anthropological Economist must talk about socio-cultural advantage which includes linguistic advantage, social advantage and cultural advantage; this approach calls for a maximization of socio-cultural advantage and a minimization of socio-cultural disadvantage. This must be accompanied wherever applicable, by cultural remediation as well, and must be studied in conjunction with non-cultural factors.

### **Other Auxiliary concepts**

We review some other auxiliary concepts below to the extent they have a bearing on our approach, and proceed to integrate them with our concepts in Anthropological Economics as well.

## **Capability Approach**

In Economics, human development also involves a study of the human condition along with the Capability approach. The Capability approach, also referred to as the Capabilities approach is an economic theory first developed in the 1980's as an alternative approach to Welfare Economics. In this approach, the Bengali Indian Economist Amartya Sen and American Philosopher Martha Nussbaum introduced a plethora of new ideas in Welfare Economics. This concept brings to the fore a range of ideas that were hitherto ignored from the realm of traditional economics. The emphasis of this approach is the capability of individuals, and the resultant impact it can have on society. The approach emphasizes functional capabilities or substantive freedoms such as the ability to live to old age, participate in economic transactions, engage in political activities etc. thus, poverty is capability deprivation. This is contrasted with traditional concepts of utility fulfilment or choice.

Amartya Sen initially argued for five components in assessing capability, which were:

1. The importance of real freedoms in the assessment of a person's advantage
2. Individual differences in the ability to transform resources into valuable activities
3. The multi-variate nature of activities giving rise to happiness
4. A balance of materialistic and not-materialistic factors in evaluating human welfare
5. Concern for the distribution of opportunities within society

Subsequently, and in collaboration with political philosopher Martha Nussbaum, development economist Sudhir Anand, and Economist theorist James Foster the Capabilities approach was made central to Economics such that it inspired the creation of the Human Development Index or HDI. It also led to the creation of the Human development and capability association which was launched at the Fourth capability conference in Pavia, Italy. This approach was subsequently modified with a high-income country focus by Paul Anand and his colleagues. It also led to the creation of the Human Development and Capability Association in the 2000's, and has been widely debated and discussed ever since. In addition, Nussbaum proposed the following core capabilities: Life, being able to live a life of normal length; Bodily health, including reproductive health; Bodily integrity, and movement without fear; freedom of senses, imagination and thought; freedom to express emotions; freedom to practical reasoning; freedom of social interaction; freedom of affiliation with groups and institutions; right to self-respect; and control over one's environment. Some economists however argue that these notions are too western-centric, and do not take into considerations specifics from other parts of the world.

## **Human Development Index**



The Human Development Index, or HDI for short, was developed by the United Nations, and is a widely used measure of human development, measuring capabilities in health, education, and income-earning potential. It may also be defined as a statistic composite index which is used to rank countries into four tiers of human development. It is based on the Human Development approach proposed by Amartya Sen and the Pakistani Economist Mahbub ul Haq. Other Economists involved were Paul Streeten, Frances Stewart, Sudhir Anand, Meghnad Desai, Gustav Ranis, and Keith Griffin. One of the avowed goals of this approach was to shift the basis of development from GNP-driven metrics to human-centric approaches towards development.

In 2010, the Inequality Adjusted human development index or IHDI was introduced. This measure captures the losses in Human Development due to inequality in health (life expectancy index), education (education index- mean and expected years at schooling) and income. Among the best performers on this score are Norway, Iceland and Japan, while the worst performers are Niger, South Sudan, Chad and the Central African Republic.

### **Definition of poverty**

The term poverty stems from the Old Norman French word poverte, and from the Latin term popertas. There are several overlapping definitions of poverty depending on the context of usage, and the views of the person proposing the definition. The layman usually defines poverty as the lack of material possessions or inadequate income to fulfil even basic wants or needs. According to the United Nations, poverty is the absence of choices and opportunities to participate effectively in society, and economic development programmes. Poverty is therefore, synonymous with insecurity, powerlessness and exclusion of individuals, institutions and societies from the economic landscape. According to the World Bank, poverty is the pronounced deprivation in well-being and the inability to acquire basic goods to live with dignity. According to the Scottish poverty information unit, "Poverty is defined relative to the standards of living in a society in a specific time. People live in poverty when they are denied an income sufficient for their material needs, and when these circumstances exclude them from taking part in activities which are an accepted part of daily life in that society." However, the nature and degree of poverty can vary widely from context to context, and can only be assessed through fieldwork.<sup>32 33</sup>

Poverty is commonly defined in three different ways:

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<sup>32</sup> Poor Economics: a radical rethinking of the way to fight global poverty: Abhijit V Banerjee and Esther Duflo, Public Affairs, New York

<sup>33</sup> The Economic Lives of the Poor Abhijit V. Banerjee and Esther Duflo October 2006

1. The poverty line is defined according to the minimum income required to satisfy a person's basic needs. This is based on the cost of basket of everyday consumer commodities.
2. The poverty line is defined individually by the society based on income distribution. The standard approach is to draw it at fifty percent of the median income or consumption
3. The third model defines as poor who, not only have low incomes, but suffer low deprivation of several other factors of well-being. These may include unemployment, poor housing, poor health, and inadequate education.

Poverty can also be defined in absolute and relative terms.

### **Absolute poverty**

Absolute poverty refers to subsistence below minimum, socially acceptable living conditions, normally defined on the basis of calorific, or nutritional standards or financial thresholds. It is the non-availability of means to provide for housing, food or shelter. In such cases, poverty levels are mostly defined using a universal baseline, without references to people's incomes. For a long time, a dollar a day was considered the threshold for poverty, but this did not take into account differences in purchasing power, and differences in cost of living in different parts of the world. The current threshold as of 2020 is \$1.90 per day. In some cases, the quantum of disposable income, or a percentage of disposable income to total income are also used. In some countries, the number of people receiving social assistance is used as a yardstick as this is somewhat easy to compute from reliable statistics. According to Robert McNamara, absolute poverty is a condition so limited by malnutrition, illiteracy, disease, squalor, infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency.

### **Relative poverty**

On the other hand, relative poverty compares the lowest segment of a population with better-off segments on the basis of different parameters such as indices of income inequality. It refers to a situation where a person has a low standard of living in relation to people at the same time and place. Absolute and relative poverty may move in different directions. For example, relative poverty may decline while absolute poverty increases. This connotes a reduction of inequalities between different segments of the populations. Relative poverty is usually measured through quintiles, deciles, percentiles etc. Mean median, mode and normal distribution models are also sometimes used.

### **Primary poverty versus Secondary poverty**

Primary poverty is the poverty arising due to lack of steady or adequate income, or the absence of means to make a decent living. On the other hand, secondary income refers to poverty

arising from inappropriate consumption factors. For example, a person may choose to spend his money on alcohol and tobacco instead of nutritional needs. Even if he chooses to spend money on food, he may not always bear in mind nutritional requirements. Money may be splurged on luxuries, and most individuals do not even understand the importance of retirement planning.

### **Objective and subjective perspectives of poverty**

Poverty can also be approached by objective or subjective approaches. The objective approach is also sometimes referred to as the Welfare approach and involves normative judgements on what constitutes poverty. The Subjective approach, on the other hand, places a premium on people's preferences, and on individual utility. The objective approach is preferred by a vast majority of economists because of practical difficulties involved in employing and aggregating subjective approaches. Advocates of objective approaches argue that individuals are not always the best judge of what is good for them. However, some economists have now begun to use subjective measurements as an alternative, and a few recognize the limitation of the so-called objective indicators. Modern participatory poverty assessment methodologies have tended to use both subjective and objective indicators to understand poverty from different angles.

### **Physiological and sociological deprivation**

Deprivations can also be classified into physiological and sociological deprivations. According to the physiological definition, people are poor because they lack income, clothing, food and shelter, and lack access to credit, land and social infrastructure. This is often compounded by power structures and governance issues, as well as policy frameworks and distribution systems. Strategies to reduce poverty include measures to boost income, and increase health and education, as well as augmenting government and social infrastructure. In other cases, poverty may be due to social and cultural factors. People are often trapped in a vicious cycle of poverty, and in many cases, this is compounded by social stratification and ethnic conflicts to name a few. These are certainly not trivial, and poverty in many parts of the world can be attributed to sociological causes. The human capability concept of poverty focuses on expanding people's opportunities, and covers both the physiological and sociological realms of deprivation. Thus, poverty may not just encompass the state of deprivation in which a person lives, but also the lack of real opportunity, due to social or personal constraints. Thus, the human capability approach to poverty reduction focuses on the empowerment, facilitating their participation in society, and enabling them to move upwards on the socioeconomic ladder.

### **Situational and generational poverty**

Eric Jensen also distinguishes between situational and generational poverty in a study from "Teaching with poverty in mind (2009)". Situational poverty is often of a temporary nature, and occurs because of an event such as a crisis or a loss. Examples of these could include health

problems or job loss. Generational poverty involves the birth of a generation of people into poverty. In such cases, families seldom find the means to extricate themselves from the situation at hand. Such scenarios are also associated with cultural stigma, and the mechanisms of escape from poverty are often complex and long-drawn.

### **Poverty due to direct and indirect factors**

Poverty may also be caused by direct and indirect factors. Direct factors could include the absence of job opportunities in hand due to various factors which could include economic conditions such as temporary recessions or downturns. Indirect factors could include factors such as caste, class, religious, cultural prejudice etc., preventing a person from taking advantage of economic activities, or causing him to be marginalized from the economic sphere. It could also include cultural factors denying people educational opportunities.

### **Endemic poverty**

Extreme poverty, chronic poverty, deep poverty, abject poverty, destitution, indigence or penury is defined by the United Nations “as a condition characterized by severe deprivation of basic human needs including food, safe drinking water, sanitation facilities, health, shelter, education, and information.” In the past, the vast majority of the world’s population lived in extreme poverty. However, the percentage of people living in absolute poverty has been falling steadily over the years. The figure in 2015 was 15% as compared to 80% in the year 1800. People may also often be pushed into poverty when prices rise faster than incomes. It may also arise when cultural and ascribed statuses change over time, or when people get culturally or economically marginalized.

### **Malnutrition**

Malnutrition arises from inadequate or unbalanced consumption of nutrients. These may include calories, proteins, carbohydrates, vitamins and minerals. According to a study, there were over 800 million malnourished people in the world in 2018, representing over ten percent of the population. Malnutrition directly and indirectly contributes to over half a million deaths annually, though the number is steadily decreasing. There are many different types of malnutrition such as the Protein Energy Malnutrition or under nutrition or PEM/PEU. Protein deficiency often leads to conditions such as Kwashiorkor which is caused by protein malnutrition and Marasmus which is caused by deficiency in calorie intake. Malnutrition is also often categorized into first, second and third degree based on actual versus median weights for different age groups. (Gomez 1956) More recently, British Psychologist John Conrad Waterlow has also established a new criteria for classifying malnutrition based on research in Jamaica and elsewhere. This came to be known as the Waterlow Index, and uses a weight for height measurement.

## **Poverty and unemployment**

Unemployment is a chronic problem in many countries, both developed and developing ones. Causes of this include factors such as rapid increases in population, low productivity, inability to make use of opportunities due to absence of relevant education, skill underdevelopment etc. In economics, unemployment refers to the extent and degree of joblessness in an economy which is the state of being out of work, and definitions have been provided by the International Labour Organization and others. The common measure for unemployment is the unemployment rate, which is arrived at by dividing the total unemployed work force by the eligible workforce. In many countries, it is calculated through Labour force sample surveys, official estimates, Social insurance statistics, and Employment office statistics. Some organizations such as the Eurostat, OECD, and International labour comparisons program, adjust data to facilitate comparison across countries. Unemployment is generally seen to be a by-product of industrialization. In traditional societies, underemployment or disguised unemployment is much more common. Some have blamed the rise of computers, automation and other technologies for rising unemployment. However, others critique this view, stating that technology has shifted jobs to other sectors, and has played a vital role in human capital development. However, employment in the manufacturing sector may have declined in the past two decades in several countries in relation to the capital employed. For example, in India and elsewhere people have now begun to talk of jobless growth, and most employment is now being created in the services sector. A related measure is Employment elasticity, which is the percentage change in employment associated with a one percent change in economic growth. Unemployment is also increasing among educated youth, and many graduates and post-graduates are increasingly finding it difficult to get jobs commensurate with their skills and abilities. Another concern is that unemployment among older workers is also increasing, and workers are often forced to take voluntary retirement.

## **Poverty and underemployment**

Underemployment stems from a situation where people are working fewer hours a week or month than they would like to. It may also include people who are performing jobs which are not upto their potential. Examples of this are household jobs. Disguised unemployment arises when people seem occupied full time, even though the services they render are less than full-time. This is also sometimes known as hidden unemployment. For example, a family of ten may often work in a farm even if less than five are sufficient to do the job.

## **Poverty and seasonal and temporary employment**

Seasonal unemployment is also common in countries like India, and is particularly common in the agricultural sector. Irrigation facilities are not available on most of the land, and it is not

prepared for multi-cropping. Thus, farmers cultivating seventy percent of the land remain voluntarily unemployed for between four to six months in a year, and the percentage of the labour force which can get satisfactory employment during the off-season is relatively low. According to the First and Second Agricultural Labour enquiry committees, agricultural labour in India had 276 and 237 days in 275 and 237 days employment in 1950-51 and 1956-57 respectively. Employment elasticity in Agriculture was estimated to be 0.64 during 1973-78. It declined to 0.49 during 1978-83 and to 0.36 during 1983-88. Disguised unemployment and surplus employment is also rampant in the agricultural sector. Shakuntala Mehra's concluded that 17.1 percent of the workforce in agriculture was surplus in the 1960's. Another type of unemployment is frictional unemployment which occurs when people are either in-between jobs, or looking for their first jobs. Structural unemployment occurs due to constant changes in technology and skills requirements as old skills become redundant, and new one take their place. Both frictional unemployment and structural unemployment are inevitable to some degree. Cyclical unemployment occurs as a manifestation of long-term business cycles in the economy which also includes periods of economic contraction.

### **Poverty and chronic unemployment**

Unemployment may also be chronic, and this may either be an indicator of a downturn in the economy or an individual's inability to get a job. Long-term unemployment is when workers are jobless for twenty-seven weeks or more, even after actively seeking employment. Individuals who are unemployed in the long-term are likely to experience heightened levels of anxiety and depression besides a feeling of worthlessness. Such feelings were common during the Great Depression of the 1930's in the USA, but were mitigated by government measures to boost the economy such as the New Deal, and temporary measures such as the opening of soup kitchens.

### **Unequal distribution of income, assets and wealth**

Economic inequality, also known as the gap between the rich and the poor, income inequality, wealth disparity, or wealth and income differences refers to disparities in the distribution of wealth or income within or across populations and individuals. Economic inequality has tended to vary greatly across space and time, and has been one of the causes of social uprisings including anti-government uprisings and communist revolutions in some countries. Some societies have tended to frown upon inequality, but others have not tended to do so. Most see inequality as a major social problem, yet in the early days of economics, a few even saw it as beneficial. In India, the top ten percent of the people earns 33% of the income, while the bottom ten percent earns only 2 percent of the income.

Causes for unequal distribution of wealth include:

1. Lopsided growth: some sectors such as technology have grown faster than agriculture

2. Absence of rural infrastructure
3. Differential regional growth
4. People lack employable skills to take advantage of economic opportunities
5. Law of inheritance and transmission of property
6. Landlord or Zamindari system in countries such as India
7. Oppression of women
8. Low spending on social security
9. Lack of scientific design of social security systems
10. Unequal asset distribution and presence of landless labourers
11. Unscientific taxation structures and absence of wealth tax

The problem of inequality is particularly pronounced in developing countries like India, which have also known structured inequality propagating systems such as the age-old caste system and the class system. Inequalities are also common in countries such as the USA, where there are a large number of ethnic and socio-economic groups. Therefore, the principles of Anthropological Economics can be applied to solve problems in a wide variety of contexts and situations, both in developing countries and developed ones. Poverty can be due to different factors such as absence of an inadequate income, instability of income, absence of a knowledge or vision among people, lack of social support systems, lack of government support systems, absence of saving, and absence of asset creation. All these are fundamentally different factors, and Anthropological Economists must acknowledge this.

### **Lorenz curve**

A graphical representation of wealth distribution was developed by the American Economist Max O. Lorenz in 1905. The percentage of population is represented on the X-axis, while the percentage is represented on the Y-Axis. A straight diagonal line on the graph represents equal wealth distribution. However, the Lorenz curve is a curved line showing the actual wealth distribution. A greater distance between the straight line and the curve implies greater income inequality, while a curve close to the straight line implies less inequality. This can also be represented in the form of statements such as "The bottom ten percent of the population has only one percent of the income." A coefficient is the Lorenz asymmetry coefficient which is a summary statistic that measures the degree of asymmetry of the curve. However, the GINI coefficient is the most commonly used along with the Lorenz curve. In other cases, the Lorenz curve is also used to depict asset inequality and social inequalities, in a given society. This would therefore constitute a variation of the basic theme.

### **GINI coefficient**

The GINI coefficient is another way of presenting information about inequality. It is the ratio of the area between the Lorenz curve and the hypothetical line of absolute equality, and the whole area under the line of absolute equality. In case of Gini coefficient, the extreme values are 0 and 1, and these may also be represented as percentages (0% and 100%) in this case, 0 represents perfect equality, while 1 represents wealth concentration in the hands of only one individual (everyone else has nothing)

### **Culture of poverty**

Culture of poverty is a concept in social theory that states that the values and attitudes of people trapped in poverty, further perpetuate the vicious cycle of poverty, in which they may be consequently trapped even for generations. This may also be referred to a poverty-perpetuating value system. This concept first appeared in 1959 in a study among Mexican families by Anthropologist Oscar Lewis. It attracted both attention and criticism in the 1970's, and made a strong comeback in the 2000's. It seeks to explain why poverty persists despite the formulation of antipoverty programs, and strongly argues that poverty cannot be understood on material bases alone. In the words of anthropologist Oscar Lewis, "The subculture of the poor develops mechanisms that tend to perpetuate it, especially because of what happens to the worldview, aspirations, and character of the children who grow up in it". (Lewis 1969)

Victorians also thought that poverty could be attributed to cultural factors, and this is a recurrent theme in Charles Dickens' novels. However, others emphasize the need to analyse structural factors along with the motivation of individuals. There is also a risk that this approach can be used to perpetuate cultural stereotypes, biases and prejudices, and even unwarranted moral critiques of the poor. Lewis gave seventy characteristics of the presence of the culture of poverty, which he believed was not shared by all the lower classes. According to him, people forming a part of the culture of poverty have a strong feeling of hopelessness, despondency and despair, besides a feeling of perpetual marginalization and alienation from their own society. He argued that this could not in most cases be attributed to racial or ethnic factors, and that there were many other factors at play. They often lack the vision, courage and determination to break out of the vicious cycle of poverty and may have a myopic, self-centric view of the world, mostly due to the lack of knowledge. He argued that people usually break out of the culture of poverty through better education, contact with other groups, and memberships of institutions. This is caused by, and further leads to a crisis of self confidence and low intrinsic and extrinsic expectations, what one might call the Golem effect. This concept evolved in the context of developing countries, but could be applied to developed countries too. It consequently influenced work Daniel Moynihan and others during the war on poverty carried out during Lyndon B Johnson's presidency in the 1960's.



Other Anthropologists have sought to research poverty in relation to factors such as Family structure, and breakdown in family values, presence or absence of different types of welfare benefits, nature of employment and patterns of unemployment –frictional, seasonal, cyclical etc., quality of education, and desire for change arising from cultural mores, values and norms. A complete summary of various poverty measurement methods in common use has been compiled by the Mexican academic Julio Boltnivik. Another notable approach for poverty alleviation is Human capability approach proposed by Amartya Sen. This approach seeks to maximize human capability and potential to minimize poverty, and proposes various parameters to this effect.

### **Ethnography**

From a literal standpoint, Ethnography is the science of study of ethos, of nations, or cultures of different peoples. It may also be defined as a systematic definition of a contemporary culture through field work and qualitative studies, and draws on the 'lived experience' of subjects. It is a qualitative method commonly used in social sciences, particularly in anthropology and sociology to procure data on human beings or cultures. This is of paramount importance because the field is to an Anthropologist what a science lab is to a biologist. According to a definition provided by Hammersley and Atkinson (2007), "Ethnography usually involves the Ethnographer participating overtly or covertly in people's daily lives for an extended period of time, watching what happens, listening to what is said, and asking questions through formal and informal interviews, collecting documents and artefacts, in fact, collecting whatever data is available, to throw light on the issues that are the emerging focus of enquiry". According to the MacMillan dictionary of Anthropology, such studies combine both descriptive and analytical elements, but tend to focus on a specific culture or society, and consider theoretical or comparative generalizations based on the culture studied. The common methods employed for data collection are participant observation, interviews and questionnaires. In some cases, various types of projective techniques are also used. In the biological sciences, however, this kind of a study is called "field study", or "case report". An ethnographer tries to maintain a professional stance, and tries to be objective at all times without losing his creativity. It therefore, involves collection of field notes, maintenance of diaries and observation of ethnographic moments. Much of his information comes from data gathered in bits and pieces, and also from 'Ethnographic moments.' Ethnography initially began with the study of exotic cultures in distant lands. However it is now becoming common place to carry out ethnographic studies in locales closer home, and even in urban settings. (Strathern 1999)

The first step in ethnographic research is the selection of a problem or a topic of interest. The problem chosen must have basic research validity and applicability. It must attempt to solve a problem at hand, or make life better for a group of people. It must be within the researcher's

area of competence, and the timeframe must be realistic. The cost and other constraints must also be borne in mind. Research is often preceded by a research design, which contains the blueprint of research, and basic methodology that will be followed. Ethnographic research is preceded by a period of intensive study where the languages, the recorded history and the customs of the people are studied. A study of social and cultural institutions, politics, and religious institutions may also be carried out. Work done by other ethnographers on the subject is also studied, and commented upon. Thus, Ethnography is the science of study of humans, and inter-subjective rules apply. Concepts used in the study of social phenomenon may not be demonstrable with methods used in physical sciences (Winch 1958) While doing fieldwork, emic and ethic approaches are both applied. The research site must be chosen carefully. An ethnographer must keep his subject's interests and sensitivities in mind, but not get carried away by their unreasonable demands. He may observe them from close quarters at times, but must maintain a distance so that his objectivity is not compromised. In other words, he must behave like a marginal native. He must maintain confidentiality at all times, and the direct uses and potential uses of his work must be disclosed to his subjects in most cases. While Anthropology was once considered to be value-free, this is no longer the case as different professional bodies have imposed non-binding guidelines on professional ethnographers. Examples of these have included guidelines by the National Association for the Practice of Anthropology (NAPA), Codes of conduct by the American Anthropological Association (AAA) which base them on the rights and welfare of subjects, besides full disclosure of relevant information including objectives, methods and sponsorship details. It also takes into consideration the requirements of other Anthropologists and fellow workers, and evolved from studies made on ethics by Abraham Edel, May Edel, Brandt and others.<sup>34</sup>

According to Barnard and Spencer (1996), ethnography may refer to ethnography as a process (participant observation and fieldwork) and ethnography as a product (report writing). (Agar 1980) Thus, the product depends on the process, but the relationship is seldom simple. Ethnographies may have evolved by early travel writings and recordings made by administrators about disappearing ways of life, but these now constitute a different genre. (Channa 1992) Attempts were made from time to time to develop ethnographic guidelines (Example, Joseph-Marie Degerando), but these were never widely followed. Ethnography may also be divided into the British and the Chicago schools. The British school has a close association with British colonialism, and social anthropology, even though it eventually distanced itself from these. The Chicago school arose from the University of Chicago, and from the work of the doctoral students of Robert Park and Ernest Burger. These were based on closer-to-home urban studies with a sympathetic eye on human behaviour. Ethnography took

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<sup>34</sup> HANDBOOK of ETHNOGRAPHY, Edited by Paul Atkinson, Amanda Coffey, Sara Delamont, John Lofland and Lyn Lofland, Sage Publications, 2007

off in a big way in the 1880's and the Torres straits expedition was a watershed event in Ethnography. However, the participant observation method took root with Bronislaw Malinowski's study of the Trobriand Islander's in 1922 which made lengthy field work popular, and eclipsed the historical method. A R Radcliffe Brown also studied the Andaman Islanders, and Edmund leach spent many years in Burma. These three studies greatly shaped ethnography as we know it today. The functionalist approach was also developed by Malinowski, who argued that every aspect of society, including every custom, material idea, object, and belief had a role to play in the maintenance of the whole, and that objects, activities, and attitudes existed as a means towards an end. (Malinowski 1944) This idea was highly influential, even though many saw it as a western myth. Another approach, known as the structural-functional approach was proposed by Radcliffe-Brown, and the idea first originated in a lecture in Birmingham in 1914. He took the needs of society as the starting point, and studied the enduring relationships between individual and groups. He also compared society with a biological organism.

Ethnography has also tended to be positivist. It was argued that natives possessed no real written history of their own, and that accurate views could only emerge through external approaches. AR Radcliffe Brown for example, observed, the Andaman Islanders were decimated with measles in 1922, and could in no way be expected to construct their own history meaningfully. Levy-Bruhl also proposed that the primitive mind is pre-logical, and could not distinguish between fiction and reality. However, positive approaches came with their own dangers, as external views were often imposed on subjects. As an example, Malinowski's interpretations on Trobrianders varied considerably with Annette Weiner's feminist perspectives. Thus, all interpretations are to some extent shaped by people's previously acquired map of the world. (Benton and Craib, 2001) It becomes therefore extremely important to capture both emic and etic perspectives as Ethnographic methods are increasingly applied to the study of economic systems. <sup>35 36</sup>

Today, ethnography is taking off in completely new directions. Ethnography is increasingly becoming critical, and is being used to solve real-world problems. (Chari and Donner, 2010) Reflexive Ethnography is another new trend, and this identifies injustices in a culture, and seeks to remediate them. Cognitive Ethnography critically examines the details of small events, and documents the worlds of meaning. The idea of 'thick description' was promoted by Clifford Geertz in the 1970's, and this approach systematically investigates the how's and why's behind observed data. Much ethnographic research is now focussed on urban social systems, and non-primitive, literate subjects with emphasis of social processes, social change, and modernization.

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<sup>35</sup> Ethnography John D. Brewer, Oxford University Press, 2000

<sup>36</sup> What is Ethnography? Methodological, Ontological, and Epistemological Attributes, Tony L. Whitehead, Department of Anthropology University of Maryland

Ethnography has also become global and multi-sited, and variables are often tracked across societies.<sup>37 38</sup>

### **Econoethnography**

Ethnographic methods are increasingly been used in the study of economic systems particularly by those with an Anthropological background, but they have not yet become mainstream in the field of economics. Studies of economic systems, even when they have been carried out, have also traditionally tended to focus on illiterate and so-called primitive societies. In most cases, such studies only formed a small portion of the total overall study, and were rather limited and descriptive in scope. Ethnography has also evolved into other streams, such feminist, critical, salvage, post-modernist etc., but very little has been done to develop ethnography from the standpoint of non-western, emic perspectives. From our perspective, fieldwork must become central to Anthropological Economics, and indeed economics itself, and policy formulation, and outcomes determined by it. Auto-ethnography is however beginning to take off in many parts of the world to a slow but steady start. TN Madan's study of Kashmiri Pundits, and DN Majumdar's study of Himalayan polyandry spring readily to mind, but these studies did not primarily address economic systems. Other studies by Andre Beteille and Karin Kapadia in South India, and FG Bailey in Eastern India, have addressed caste and class, but have not studied economic systems extensively. Jan Breman has studied Agrarian relations in South Gujarat between the Anavil Brahmins and the Dublas, and the Hali system, but this comprises only one aspect of the study of economics systems of a region, and cannot be called multi-faceted. MN Srinivas has studied the culture of the people of Coorg, Jonathan Parry has studied and the economics of the death business in Benares, Serena Nanda studied the Hijras of India, but these cannot again be called multi-faceted. Other relevant studies have included a study in community and rural development in North India by SC Dube, a study of resource management among the arctic people's by Fikret Berkes, a study of occupational patterns among the Bakkarwals by Aparna Rao, and a study of Tolai economic growth by Scarlett Epstein, but these have studied one or a few aspects of traditional economies only, and were therefore restricted in scope.

Nonetheless, some very notable studies have been carried out till date, other than the study carried out by the American Anthropologist Oscar Lewis on the Culture of poverty through works such as "Five families" (1959), "The children of the Sanchez" (1961), "La Vida" (1966), and "A death in the Sanchez family" (1969). A famed Indian Anthropologist, Tarak Chandra Das studied the agricultural practices and economic life of the Chiru tribe of North East India in 1937. This was a notable attempt to study their economic practices against the backdrop of

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<sup>37</sup> Ethnography: A way of seeing, Harry F. Woclott, University of Oregon, Altmira Press 2008

<sup>38</sup> Ethnography: Step by step Third Edition David M. Fettermann Sage Publications, 2010

their culture. Another Anthropologist, Robert McNetting studied the Koyfars, a group of sedentary farmers and analysed their economic practices with respect to their culture and the market economy. Netting also carried out research on the German speaking Alpine community of Torbel in Switzerland. This study explored the tripartite relationship between culture, economy, and natural resources. Another study by Madhav Gadgil and Kailash Malhotra analysed seven hereditary caste groups in Maharashtra, India and the relationship between their occupation, their culture and available resources, with special emphasis on exchange of produce. Another Anthropologist Harold Conklin did a pioneering study on the slash and burn cultivation of the Hanunoo tribe of the Philippines, and contrasted it with similar systems elsewhere. Daromir Rudnycki has sought to analyse how neo-liberal economic discourses have been utilized by Indonesian Muslims working in the Krakatau Steel Company to create a spiritual economy conducive to globalization, while enhancing the Islamic values of workers.

Econoethnography would therefore, represent an economic portrait of a people. It would represent a study of economic activity usually tied to culture, through prolonged and systematic fieldwork. Anything based on Anthropological concepts and ratified through well-conceptualized fieldwork, is likely to remain relatively constant over space and time than anything based on speculation or conjecture.

Thus, from our perspective, economic ethnography can be divided into the following types, and each of them can impact policy formulation in turn:

- Study of specific aspects of culture with a view of understanding their impact on social and economic development (may include study of its strengths, weaknesses, opportunities and threats besides salient features, proclivities etc.)
- Study of culture in general with a view of understanding its impact on social and economic development (may include study of its strengths, weaknesses, opportunities and threats besides salient features, proclivities etc.)
- Study of some aspects of an economy or a study of some of its economic systems
- Comprehensive study of a region's economy (may include study of its strengths, weaknesses, opportunities and threats besides salient features, proclivities etc.)
- Comprehensive study of a region's economy in relation to a wider global context, and a study of its interrelationship with other economic systems

Thus, econoethnography would be the basis of an emic approach to economic planning, in addition to a natural integration with extraneous considerations, and must be the key input into grassroots planning as well.

Other types of econoethnography that we propose include:

Perpetual econoethnography: Per this approach, a culture is studied in perpetuity to understand the nature of changes in society better, and at times use it as a yardstick to study other cultures better. Such studies cannot be carried out by single teams, and a proper handover mechanism must be formulated from time to time. This type of econoethnography may be particularly useful to identify long-term cultural orientation, as well as changes to trends over a period, and can be particularly useful to bring about policy changes from time to time.

Microeconoethnography: This comprises the study of an individual, or a group of individuals with a view to drawing generalizations or inferences about a culture. This approach must be accompanied by an appropriate sampling strategy to draw meaningful conclusions and generalizations.

Macroeconoethnography: This comprises the study of a culture as a whole, of which a study of individuals may or may not form a part.

Functional econoethnography: Includes the study of one or more functions of a culture.

Lifecycle econoethnography: Follows the human lifecycle approach, and traces human activities from the cradle to the grave. For this approach, a suitable sampling strategy must be formulated, and the lives of a spectrum of ordinary citizens studied.

Extrapolated econoethnography: Tries to extrapolate inferences about a culture from a study of a few aspects of a culture, or a few individuals by drawing generalizations.

In addition, econoethnography could also be long term (even perpetual) and short term, based open or hidden observations (the latter is normally not preferred), direct and indirect observations, or involved versus semi-helicopter approaches. Most techniques of standard ethnography can be carried forward with minimal modification. For example, tape recorders and audio-visual aids can be used, and local assistants employed. (Lewis 1961) (Powdermaker 1962) multi-disciplinary teams may also be used, each well-versed with one aspect of the local culture, or with one branch of economics.

### **Introspective method**

This is the ability of the observer to reconstruct events which go on in the mind of another person with the help of self-observation. Thus, accuracy may stem from long-lasting experience. This, may form an integral part of fieldwork, or may alternatively be combined with it.

### **Investigative method**

Ethnography can also be used for deeper investigative analysis and can be used for Root Cause Analysis or causal analysis between variables. More recently, critical ethnography and reflexive ethnography are being used to solve a wide variety of real-world problems and make lives better for subjects. Investigative ethnography can also be used to carry out complex multi-dimensional analyses such as sources of income and expenditure in a multi-cultural data set, and the readiness to undertake entrepreneurial activity, or invest in old age pensions in various situations. Likewise, the financial security and the propensity of different ethnic groups to save can also be assessed. The Investigative method can lend itself to even more complex analysis, but must be coupled with ethnography. For example, the entire gamut of concepts tied to Behavioural Economics can be ratified through investigative fieldwork, and further concepts defined and tested.

### **Combination with Randomized controlled trials**

A randomized controlled trial or RCT is a full-fledged experimental method widely used in the social sciences. This method involves the use of an experimental group and a control group, and the control group is often administered a placebo. This is a way of doing impact evaluation in which a random assignment to experimental and control groups is made. It tests the extent to which targets and goals are achieved. In an RCT, the programme or policy is viewed as an 'intervention' in which a treatment – the elements of the programme/policy being evaluated – is tested against objectives, as measured by a predetermined set of indicators.

### **Case study method**

Case study research involves studying individual cases, usually in their natural environment, and for extended periods of time. Case study method is one of the popular types of research design used in Anthropology. It is an intensive study of a particular case. It comprises of a study of. (1) A person, (2) A group of person such as family or team, (3) A class of person such as actors or professors, (4) An ecological unit such as neighborhood or community, (5) cultural unit such as fashion or institution. It studies entire units in their totality and not just aspects or variables of units, and may employ several methods to prevent errors or distortions. Cases are also categorized into critical cases, unique cases, and revelatory cases. Critical cases are cases which are critical from the point of view of a study; a unique case is one that possesses unique characteristics not shared by other cases, while a revelatory case is used to reveal some unique aspect for a study. A longitudinal study or a panel study involves the repeated observations of the same people over short or long periods of time, while a dual synchronic study helps study data before and after an event. Such studies can help distinguish the effects of short-term factors from long-term ones.

### **Thematic Apperception Tests**

Another useful technique that can be carried forward from Anthropology and other sub-fields of social sciences to economics is that of Thematic Apperception Tests, popularly known as TAT. The earliest versions were developed by the psychologist Henry A. Murray, and psychoanalyst Christina D. Morgan in the 1930's. Respondents are often shown pictures or photographs of people or scenes, and are asked to explain them. The answers provided often co-relate to their mental makeup, and from our perspective, to their cultural attributes as well. From our perspective, an assessment of how seriously people in different cultures respond to these tests is an efficacy of the design of these tests as well. The Rorschach Inkblot test is another kind of a test where subjects' interpretation of inkblots is used to analyse subjects' psychological interpretations. The Holtzman inkblot technique is an inkblot technique aimed at assessing personality, and dates back to the 1960's. We would assume that similar attempts be made to devise tests to study economic behaviour in diverse cultural contexts, but this process would be far from easy.

### **Economic transaction modelling and Economic transaction storyboards**

Use cases typically depict a series of Interactions between actors or stakeholders and other human actors, non-human elements of the process, and the environment. Actors are usually individuals (they may sometimes be non-individuals, but from our perspective, they are economic actors) with an identifiable behavioural pattern. While identifying an actor it is necessary to base them on roles, and not individuals. Use cases are always constructed from the actor's point of view, and actors are depicted as stick-men. Actors may be categorized into primary actors, secondary actors, or tertiary actors. The last two are sometimes referred to as supporting actors, and off-stage actors. The sequence of steps in a use case is referred to as a scenario, and success and failure scenarios are often shown. Use cases are interwoven into use case storyboards. Use cases were invented by Ivar Jakobson in an Information Technology context way back in the 1990's. They are prepared to varying levels of detail and formality. We propose that they be extended to the field of Anthropological Economics and called Economic transaction cases.

Activity Diagrams show activities, states and transitions between activities and states. Activity diagrams focus on the flow of activities involved in a single process, but also show inter-relationships between processes in some cases and capture activities that are made up of smaller actions. These are used to model process flows and capture process activities at a different levels of detail. Such diagrams normally depict the current state of affairs, and are handy visual aids. These must be renamed Economic Activity Diagrams from our perspective. Swimlane diagrams often provide information at a greater level of detail, and provide information about the Author of the actions as well. The starting point of an activity diagram is



the identification of use cases, actors and classes. Actors may be identified based on a suitable sampling strategy such as random sampling, stratified sampling or snowball sampling.

### **Economic Culture: A Cultural taxonomy driven approach**

We had proposed the idea of cultural taxonomy in an earlier paper, drawing on vital work already carried out in the field. This would call for a fairly robust and scientific approach, with standardization across cultures. Examples of subcategories within a culture forming a part of cultural taxonomy include language, symbols, religion, music, art, drama, cinema, folklore, marriage, cuisine, other aspects of tradition etc. Culture also typically consists of material items such as cars, trucks which etc. form an inalienable part of every culture. While building a taxonomy, all dimensions of a culture such as values, norms, philosophies, principles, dogmas, ideas, beliefs, attitudes, symbols, traditions, ideologies, and artefacts should be included. For the purpose of an economic analysis, these should be tied to economic activity. A two way analysis would ensure that no vital elements are left out from any economic analysis. Thus, the relative importance of different economic activities and sectors of the economy can be assessed only by relating it to its cultural taxonomy. This will be an extremely important input in the process of economic planning.

### **Life histories**

Life history method comprises a study of the biographies of notable individuals, but in this case, it is recommended that the life histories of a large number of ordinary individuals are studied based on a suitably- chalked out sampling strategy along with other special cases, and from an economic perspective.

### **Historical method**

Historical method helps in understanding and analysing the relationship between the present and the past. Through this technique, the data related to the occurrence of an event is collected and evaluated to understand the reasons behind occurrence of such events. It can even be used to anticipate future events in some cases. This approach has some utility in Anthropological Economics, because the bearing of the past on the present can be understood using this technique. For this method to work, reliable historical data and documentation need to be available.

### **Grounded theory**

Grounded theory is a methodology involving the construction of theories through methodical gathering and analysis of data. This research methodology uses inductive reasoning, in contrast to the standard hypothetico-deductive method. A study using grounded theory is likely to begin

with a question, and without any pre-conceived notions or ideas. The data is collected on the ground through observation. It is generally used in generating or testing theories.

## **Phenomenology**

Phenomenology is an approach to qualitative inquiry that is grounded in philosophy and the humanities. It is a philosophy of experience, and does not take recourse to elaborate theory. For phenomenology, the ultimate source of all meaning and value is the lived experience of human beings. The phenomenological researcher attempts to recapture meanings as experienced first-hand, before he conceptualizes, or explains them. Phenomenological methods are shaped by consciousness, language, cognitive and non-cognitive factors, and personal, social, and cultural notions too. Phenomenology is therefore, the study of structures of consciousness as experienced from the first-person point of view.

## **Other approaches that can be used in Anthropological Economics**

We now present some already current approaches that can be extended to Anthropological economics with much difficulty.

### **Action anthropology**

Action Anthropology has had a long history. Franz Boas had expressed the need for a practical school of Anthropology as early as 1919, and Bronislaw Malinsowski echoed his sentiments in 1929, proposing a field called 'Practical Anthropology', to serve the needs of the marginal people and the dispossessed and to create a platform for generating and validating theories and hypotheses. Thus, the stage was set for the emergence of Action Anthropology. The term 'Action Anthropology' was coined by Sol Tax at an American Anthropological Association meeting in Chicago in 1951. Sol Tax likened Action Anthropology to a clinical method of study, where remedies were constantly improved through practice. It is a method of doing while learning, and mistakes can be made. Thus, anthropologists act as catalysts for change, and communities are a real life laboratory. Solutions to real-world problems must be found in real world contexts through imagination and collective action, and a body of scientific knowledge is applied as empirical propositions; thus, there is no standard pill for every ill, and solutions could vary from context to context. Top-down approaches fail; these often do not take into account local conditions. An Action Anthropologist must also become a part of the community's culture, and often functions like a marginal native. (Schleiser 1974) Solutions must therefore be found within the context of the community, and Action Anthropology is community advocacy. (Dana-Ain Davis 2003) (Almy 1979) Cultures must also be left intact, and must not be disturbed as far as possible. Thus, an Action Anthropologist desires to help a group of people to solve a problem, and wants to learn something in the process to be used in future fieldwork. Action

anthropology is also a “non-directive counselling for a community” where community decisions are preferred to that of the Anthropologist. (Peattie 1968) Sol Tax formulated a system of three values which were ‘the value of truth’ (representing the facts and knowledge as expressed by the community), ‘the values of freedom’ (representing the freedom for individuals to choose the group with which to identify, and for a community to choose its way of life, and ‘the value or principle of operation’ which means that questions should not be settled unless they concern the Anthropologist.

Action Anthropologists therefore challenge structural inequalities, and old mores and norms. (Mullings 2000) They are capable of liberating marginalized communities (Harrison 1997) The principles of Action Anthropology have been used in some form or the other in India by Anthropologists such as Verrier Elwin, and Jean Dreze. Apart from the Fox Project which played a crucial role in shaping Action Anthropology, the principles of Action Anthropology were applied by Holmberg in the Vicos Project, and by Spillius in Tikopia.

### **Participatory Approaches**

The role of Anthropologists began to change from passive observers to that of active involvement. Anthropologists gradually began to take on more responsibility for problem solution, and this led to a greater intensity of participation. Thus, concepts such as Action Research, Participatory Action Research, Collaborative research, and Cultural Action came into use. Participatory Action Research can be conducted in a school, college, village, organization or neighbourhood. PAR involves several distinct steps such as identification of problems, identification of constraints, obtaining information, formulating policies and plans, and taking action. In the collaborative approach, researchers, program developers and are networked to do research for joint problem solving (Schensul and Schensul 1992), and this process involves application of research skills to a high degree, and other skills such as rapport-building and negotiation as well. Cultural Action is a method used to change relationships between poor people and the power elite, through reflection and study. Other methods such as Rapid Rural Appraisal and Participatory Rural Development have also been developed to carry out research in rural areas. This involves the deployment of a diverse team of experts well-versed in different areas, and involves empowerment of locals as well.

### **Capacity Development**

The aim of capacity development is to improve the potential performance of a group of people over a period of time. Peter Morgan defined capacity development as “The process by which individuals, groups and organizations improve their ability to carry out their functions and achieve desired results over time”. It is therefore a continuous process which increases the potential and performance of individuals and groups, and helps them deal with issues and stay

relevant in future. Capacity Development may be carried out at the level of an individual, at the level of an institution, or at the level of a society. Anthropologists are expected to understand the inner working of the societies they work in, and this may include religion, customs, and values. They are expected to possess communication, collaboration, networking, negotiation, facilitation and organizing skills as well.

### **Economic Modeling**

A model is a miniature representation of something. For example, a depiction of the inter-relationships between economic activities in a country may be described as a model. It may also be a system of postulates, data, and inferences presented as a mathematical description of an entity or state of affairs through the use of independent and dependant variables. It may also refer to a computer simulation to help visualize something with greater clarity. (Samuelson and Nordhaus 1998) In Economics, a model is a theoretical construct depicting a process or a set of processes, and is an abstraction from reality. Thus, the essential features are alone retained, and unnecessary details omitted. Normally, a set of variables is used, and the inter-relationship between them is constructed, resulting in mathematical models of varying degrees of complexity. The best models are as close to reality, capture all relevant and necessary information, but are as simple to comprehend and use as possible. Assumptions must be as few in number as possible, and must be close to reality. Examples of valid and realistic assumptions could include rational behaviour and utility maximizing tendencies of economic actors. Economic models may also use quantification techniques, and must define variables carefully. Economic models may be stochastic or non-stochastic, and may be high-level or detailed. The chief objectives of economic models are simplification and abstraction of real-world data, and the use of data in forecasting, economic planning, economic strategizing, assessing impact of policies, resource allocation and positing solutions to real-world problems. They may also be used to determine prices of goods and services. They are sometimes used by institutions in decisions involving profit maximization, and other business decisions. Modelling can be made more complex when resource constraints, cooperative decision processes and institutional and legal requirements are factored in. models may also be classified into positive or normative, depending on whether they capture real-world data, or idealized states. If a large number of variables cannot be factored into a model, a *ceteris paribus* assumption is made. Many types of Economic models exist, and a few were presented by Paul A Samuelson in his 1947 work, "Foundations of Economic Analysis".

Good economic models possess several qualities, which could include<sup>39</sup>:

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<sup>39</sup> The Seven Properties of Good Models Xavier Gabaix MIT and NBER and David Laibson Harvard University and NBER NYU Methodology Conference

1. Parsimony: Only the relevant data and assumptions are used to capture the essence and unnecessary details are not included.
2. Tractability: The model is easy to analyse and can be used to solve real-world problems.
3. Conceptual insightfulness: The model helps reveal fundamental properties of economics or economic behaviour.
4. Generalizability: The model can be used in a wide variety of situations.
5. Falsifiability: The model can be empirically falsified with inconsistent data.
6. Empirical consistency: The model is broadly consistent with available data.
7. Predictive precision: The model can be used to make accurate predictions, as far as the data or circumstances will allow.

## **Types of Economic Models**

We provide a high-level overview of different types of models in general use in economic analysis. Some of these are more commonly used in today's approaches, while others are not so widely used. Most of these approaches are however expected to have greater practical utility in the field of Anthropological Economics, which is likely to raise the stakes involved In Economic modelling considerably higher, by emphasizing the important of human and cultural elements in modelling:<sup>40 41</sup>

We now present a high-level overview of some of the more common economic models in use.

### **High-level or conceptual model**

A high-level model is sometimes also known as a conceptual model. This is often construed as an entry level model which is used as a precursor for more detailed modelling or is used as a preliminary instructional aid. The objective of such model is to depict taxonomies and conceptual frameworks alone, and to serve as a starting point of a study. High-level models are often linked to more detailed models through navigational aids.

### **Detailed models**

Detailed models typically provide information at progressively greater levels of detail. The users of these models are often serious researchers who require information at a great level of depth. Detailed models usually require a profound level of knowledge, and are of great value in specific situations. Detailed models are often accompanied by mathematical equations in support of an economic theory.

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<sup>40</sup> ECONOMIC MODELS AS ANALOGIES, Itzhak Gilboa, Andrew Postlewaite, Larry Samuelson and David Schmeidler, *The Economic Journal*, 124 (August), F513–F533. Doi: 10.1111/eoj.12128 © 2014 Royal Economic Society

<sup>41</sup> *The Craft of Economic Modeling*, Clopper Almon, Department of Economics, University of Maryland, January 2014, Fifth Edition

## **Static models**

There are important concepts such as Economic statics and Economic dynamics in mainstream economics, and we believe these can be carried forward to Anthropological Economics. The earliest distinction between the two was made by Ragnar Frisch in 1928, but there was a lot of conceptual controversy regarding these terms between Hicks, Tinbergen, Samuelson, Harrod, Baumol and others. Static analysis shows a still picture of the economy as a whole, and the term was derived from the Greek word 'statikos'. Thus, in a static analysis, the time element does not enter the picture at all. A static analysis does not analyse dimensions of change at all, or predict paths of change. A static analysis studies only a point of equilibrium at a particular point, and does not analyse processes through which equilibrium is achieved over time. Static analysis is often classified into micro-static analysis and macro-static analysis. In a micro-statistic analysis, supply and demand relationships determine prices at a point in time, which are also constant through time. In a Static analysis, the size of the population, the supply of capital, methods of production, forms of business organization and the wants of people remain constant. This model is simple, but has limited utility in the real-world. Economic statics may be sub-divided into micro-statics and macro-statics. Micro-statics deals with static analysis at an individual or a group level. A macro-static analysis explains the static equilibrium position in the economy. As noted by Samuelson, "Economic statics concerns itself with the simultaneous and instantaneous or timeless variables by mutually interdependent relations." According to Professor Kurihara, "If the object is to show a still picture of the economy as a whole, the macro-static method is the appropriate technique. This technique investigates relations between macro-variables at a given point in time only."

Static models are therefore, models that depict a phenomenon at a given point in time, and do not take into consideration the time factor at all. (Hicks 1981) These are analogous to synchronic models. They are opposed to both dynamic models and comparative static models, all of which are widely used in economics. In real-life, a combination of static, dynamic and comparative static models are used to depict economic processes along with simple mathematical and algebraic functions. All variables used in such models reference the same point in time.

## **Dynamic models**

Economic dynamics is the study of change, of acceleration or deceleration. According to Prof. Ackley, "Dynamics is concerned essentially with states of equilibrium, and of change." According to Kijznets, "It is an economic theory which seeks to explain the phenomenon of economic change, the implication of such changes, and to examine the factors at work in bringing about a given change and trace the process of change and the consequences of succeeding movements step by step is called Economic dynamics." According to Hicks, "It is that

part of economic theory where everything must be dated.” It is thus, an analysis of the process of change over time, and a study of how one situation leads to another. Economic changes may be fundamental or non-fundamental. In the case of the former, the essential character of the economy changes, while in the case of the latter, it does not. The former sometimes requires more complex modelling, and cannot always be predicted. It is normally therefore, the latter which falls under the purview of Economic dynamics. Thus, maintenance of time data is an essential feature of Economic dynamics, though its importance is often disputed by Economists such as Harrod, and may sometimes be wholly unnecessary. Economic dynamics may be further classified into macro dynamics and micro dynamics. Another method, comparative statics is a method of economic analysis used by a German Economist, F. Oppenheimer in 1916, and involves the comparison of different equilibrium positions, without involving a study of the transitional period. This approach can likewise be used in Anthropological Economics as well.

Dynamic models, therefore, incorporate time as an integral part of their structure, and allow for interactions between variables over time. Dynamic models often incorporate complex mathematical modelling and equations. Dynamic models better represent real-world economic data such as business cycles, and often have higher integrity than static models. Such models are sometimes referred to as diachronic models, or synchronic-diachronic models, and are used to trace causation to causative factors. They are also often used in predictive modelling.<sup>42</sup>

### **Comparative static models**

Comparative static analysis, is used to compare two static models which are used to show the state of events existing at different points in time. These are often referred to as snapshots. Snapshots are related to comparative statics which is a method of economic analysis first used by a German Economist, F. Oppenheimer in 1916, and involves the comparison of different equilibrium positions, without involving a study of the transitional period. It was described by Schumpeter as “an evolutionary process by a succession of static models.” Comparative statics also permits a “before-and-after” analysis by comparing two snapshots of an economic model. Such models are very widely used in Economics, and have a great practical value. This approach can likewise be used in Anthropological Economics as well.

### **Univariate analysis**

Univariate analysis is the simplest form of analyzing data, and involves only one variable. Such models do not deal with relationships between variables, and may be inferential or descriptive. Such models however have limited utility in the real world, and are commonly used only in preliminary analyses. Analyses involving two variables are referred to as bivariate analyses.

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<sup>42</sup> Elements of Dynamic Economic Modeling: Presentation and Analysis, Leigh Tesfatsion, Professor of Economics, Mathematics, and Electrical & Computer Engineering, Iowa State University, Eastern Economic Journal 43(2), 2016, 192-216

## **Multivariate analysis**

Multivariate analysis is based on the principles of multivariate statistics, and involves the observation and analysis of more than one variable at a time. Such models are often used where the effect of multiple variables are required to be studied. Multivariate studies often include the analysis of several independent variables and an independent variable. Even though such analyses are complex, they have a much greater utility in the real-world and can be used to solve many real-world problems. On the other hand, univariate analysis is often too simplistic and over-simplified to have any practical value.

## **General Equilibrium analysis**

In economics, general equilibrium theory models the behaviour of supply, demand, and prices in the entire macro economy with several interacting markets and determines the equilibrium prices and quantities in all markets simultaneously. General equilibrium theory stands in contrast to the theory of partial equilibrium, which only analyses single markets at a time. General equilibrium theory both studies economies using the model of equilibrium pricing and seeks to determine in which circumstances the assumptions of general equilibrium will hold. The theory dates to the 1870s, and was developed by French economist Leon Walras in his 1874 work 'Elements of Pure Economics'.

## **Partial Equilibrium analysis**

Partial equilibrium is a condition of economic equilibrium which takes into consideration only a part of the market, or a single market to determine equilibrium price and output. According to Leroy Lopes, "A partial equilibrium is one which is based on only a restricted range of data, a standard example is price of a single product, the prices of all other products being held fixed during the analysis."

## **Endogenous models**

According to the Endogenous growth theory, economic growth is the result of forces internal to the economy and not external forces. According to the Endogenous growth theory, investment in human capital, innovation, and knowledge generation are the major contributors to economic growth. The endogenous growth theory argues that growth in an economy depends on education, health, welfare spending and development. An endogenous variable is one that is explained with a framework, or is explained within analysis.

## **Exogenous models**



The Exogenous growth theory argues that economic growth and prosperity arises due to influences emanating from outside the economy. The exogenous growth model factors investment in production leading to exports, specialization in production, government spending and technological variables to determine economic growth. Exogenous variables are external to the model or the core analytical framework, and are not often explained in the analysis.

### **Stochastic models**

The term Stochastic process refers to a process where there is a randomness in the occurrence of an event. “Stochastic” means random, so a “stochastic process” is a random process. Stochastic processes have a probability distribution and can be predicted through statistical approaches. Stochastic events cannot however be predicted precisely. The present incarnation of the word, meaning random, is believed to have come from German, but it can be traced all the way back to the Greek word “stokhos”, meaning 'aim, or guess'. A stochastic model is a tool for estimating probability distributions of potential outcomes by allowing for random variation in one or more variables over time. Stochastic modelling presents data and predicts outcomes that account for certain levels of unpredictability or randomness. The opposite of a stochastic model is a deterministic model, which predicts outcomes with absolute certainty.

### **Mathematical models**

The most formal and abstract of the economic models are pure mathematical models, which are often used in economic analysis. These may involve the use of differential or integral calculus, partial differentiation, quadratic equations, or complex algebra. Many of these models can be extremely complicated, and mathematical analysis has been one of the pillars of economic theory since the early twentieth century. Another new field is Econometrics which uses mathematical modelling in Economic analysis. The term was first used by the Economist Ragnar Frisch who was one of the founders of the Econometric Society, but Trygve Haavelmo and others made important contributions, and Econometrics is now widely used in Economic analysis and modelling.

### **Qualitative models**

Although almost all economic models involve mathematical or quantitative analysis to some degree, qualitative models are also used in analysis. Examples of such models are non-numerical decision tree analyses. Qualitative models are simple to understand and can be used by non-experts, but suffer from lack of precision.

Many different kinds of economic models have been proposed in various branches of Economics, examples being Marshallian Supply-Demand Synthesis proposed by Alfred Marshall to show how demand and supply simultaneously operate to determine price, profit maximization models, the German statistician Ernst Engel's model to show how demand for various goods varies with income, household production models, models to model consumer behaviour, models to model firm behaviour, life-cycle models of consumption to depict the lifetime consumption and saving decisions of an individual, the Ricardian model of International trade, Aggregate Supply and demand models, Interest rate models, Loanable funds models etc.

### **Economic growth models**

We now review some of the major economic growth models put forward by various economists in brief. Many less important and minor models such as the Lewis two-sector or dual-sector model developed by W. Arthur Lewis to explain growth in developing countries, and the Chenery model of structural change developed by Hollis B. Chenery to explain the transformation of agricultural economies into industrial economies are not overviewed here:

#### **W W Rostow's model**

Rostow's 'Stages of economic growth model' is one of the important linear historical models of economic growth. It was proposed by the American economist Walt Whitman Rostow in the 1960's. According to this model, economic growth occurs in the following five stages, each with its own unique characteristics:

1. The traditional society
2. The preconditions for take-off
3. The take-off
4. The drive to maturity
5. The age of high mass-consumption

Rostow's thesis is often seen as biased towards a western model of modernization. However, in the 1960's, the world's developed economies were all in the west, and other economies were seen to be underdeveloped. Rostow also tried to fit economic progress into a linear one size fits all model. His work also was criticized as being biased towards large economies with plenty of natural resources. However, this is one of the foundational models in economics, and is widely cited to this day.

#### **Harrod Domar model**

The Harrod-Domar model is a Keynesian model of economic growth advocating government intervention wherever necessary. It was proposed to explain an economy's growth rate in

terms of the level of saving and of capital. It suggests that there is no natural reason for an economy to have balanced growth. The model was developed by Roy F. Harrod in 1939, and Evsey Domar in 1946, though its roots go back to a model developed by Gustav Cassel in 1924. According to the Harrod–Domar model there are three kinds of growth: warranted growth, actual growth and natural rate of growth. Warranted growth rate is the rate of growth at which the economy does not expand indefinitely or go into recession. Actual growth is the real rate increase in a country's GDP per year. Natural growth is the growth an economy requires to maintain full employment.

The Harrod–Domar model is used analyze business cycles and explain economic growth. It states that growth depends on the quantity of labour and capital; more investment leads to capital accumulation, which generates further economic growth. The model is suitable for less developed countries, where labour is in abundance, but physical capital is not. The model states that economic growth requires policies that increase investment, by increasing saving, and using that investment through technological advances, and that full employment and stable growth rates are not generated automatically.

### **Solow Swan model**

One of the better known models of economic growth is the neo-classical model or the Solow–Swan model of growth which deals with long-run economic growth through capital accumulation. This model which was developed by Robert Solow and Trevor Swan, is an extension of the growth model proposed by Harrod and Domar and deals with an increase of productivity through technological progress and new capital. In this model, the new capital is more valuable than the old capital, because it appears as a result of the improvement of technology during the time.

### **Mankiw Romer Weil model**

Gregory Mankiw, David Romer, and David Weil developed a human capital augmented version of the Solow–Swan model to explain the failure of international investment flow to poor countries. In this model, output of poor countries is low because they have lower quality human capital than rich countries. However, incomes of poor countries could be expected to catch-up with that of developed countries subject to certain conditions such as education policy, Institutional arrangements, internal free markets, and trade with other countries.

### **Ramsey or Cass-Koopmans model**

The Ramsey–Cass–Koopmans model, or Ramsey growth model, is a neoclassical model of economic growth based on the work of Frank P. Ramsey, with extensions by David

Cass and Tjalling Koopmans. The Ramsey–Cass–Koopmans model differs from the Solow–Swan model in that the savings rate is endogenized. Ramsey initially proposed the model as a central planner's problem of maximizing levels of consumption over successive generations. The model was later adopted by Cass and Koopmans to study decentralized dynamic economies. The Ramsey–Cass–Koopmans model was geared towards explaining long-run economic growth, and not business cycle fluctuations, even though its uses were extended by other researchers.

### **Feldman Mahalanobis model**

The Feldman–Mahalanobis model is a Neo-Marxian model of economic development, created by Soviet economist Grigory Feldman in 1928 and Indian statistician Prasanta Chandra Mahalanobis in 1953. The premise of the model is a pattern of industrial investment geared towards building up a domestic consumption goods sector. It also stresses the importance of capital goods as a precursor to all-round industrial development. The model was created as an analytical framework for India's Second Five Year Plan in 1955 at the behest of Prime Minister Jawaharlal Nehru, as India felt there was a need to introduce a new approach after the First Five Year Plan ended in 1956.

### **Unified Growth Theory**

Unified growth theory was developed in light of the failure of endogenous growth theory to explain all facets of human development. Unified growth theory was first developed by Oded Galor who mapped the transition from an epoch of Malthusian stagnation to an era of sustained economic growth. The theory captures the fundamental phases of the process of development: (i) the Malthusian epoch that was prevalent over most of human history, (ii) the escape from the Malthusian trap, (iii) the emergence of human capital as a central element in the growth process, (iv) the onset of the fertility decline, (v) the origins of the modern era of sustained economic growth, and (vi) the roots of divergence in income per capita across nations in the past two centuries. Unified growth theory states that for most of history, technological progress was offset by population growth, and living standards were abysmally poor. However, this gradually changed due to technology and education.

### **Balanced Growth Theory**

The balanced growth theory is an economic theory developed by the economists Ragnar Nurkse and Paul Rosenstein-Rodan. The theory states that the government of any underdeveloped country needs to make large investments in a number of industries in order to enlarge the market size, increase productivity, and provide an incentive for the private sector to invest. Nurkse believed in balanced growth in both the industrial and agricultural sectors of the

economy. He recognized that inter-sectorial balance and inter-dependence between agriculture and manufacturing were necessary for the development and growth of the other.

### **Socio-economic Growth Models**

Socio-economic development is the process of social and economic development in a society. Socio-economic development is measured through a wide variety of indicators, such as GDP, life expectancy, literacy and levels of employment. Socio-economic growth and development models place people at the centre of the development process and emphasize that the purpose of development is to enlarge human welfare and self-actualization, and not just income. Such models regard economic growth as essential, but emphasize the need to pay attention to its quality and the distribution of wealth as well.

Many Socio-economic growth and development models have been developed from time to time. The need for socio-economic growth and development models resonates in Jan Drewnowski's definition, "Development is a process of qualitative change and quantitative growth of the social and economic reality which we can call either society or economy. Because of the close inter-relation of economic and social elements no 'purely' social or 'purely' economic development is possible. Consequently, it is better not to speak of social development separately. It is a single process which is best called simply development." In this definition, Drewnowski equates socio-economic development with change in the quality of life and quantitative growth of various parameters. This results from an improvement in health, nutrition, education, transport and communication etc., and not just an increase in per capita income or GDP. Many economists therefore have stressed on the need to include human capital in developmental models, and have attempted to link human capital development and economic growth through mathematical models. (Aghion and Howitt 1992; Arrow 1962; Benhabib and Spiegel 1994; Romer 1986)

Education is an important factor in social, economic and cultural emancipation. It provides economic opportunities and helps overcome social barriers. It enhances the earning capacity and productivity of people through a skill-acquisition process, and imparts social capability. It also largely determines social statuses of individuals. According to Horace Mann, "Education is beyond all other devices of human origin, a great equalizer of the conditions of men, the balance wheel of social machinery". Thus, the level of education determines the quality of people and development of a region. The Importance of education hardly needs any elaboration. Investment in human resources is more important than in any other resources, and may economists consider the quality of education to be a core determinant of economic growth. (Hanushek and Kimko 2000)

It is impossible for any country to achieve sustainable economic development without investment in human capital. Education improves the quality of lives of its citizens and leads to long-term social benefits for individuals and society. Education also plays a crucial role in the economic development of both developed and developing countries, and education systems are often key differentiators between nations. Over the years, Education has become a very important part of the policy of most governments. Many studies have also been conducted to study the relationship between education and the economic development of a country. However, one limitation of existing approaches is that the impact of different types of educational models, patterns and systems on economic growth is not assessed. There is also no assessment of culture on educational models, as this crucial metric needs to be used to make suitable changes to the educational system. The typical patterns of employment also vary widely from region to region, and there has been no attempt to use this information to make suitable changes to the education system while leaving enough leeway for suitable changes in future employment patterns. Linguistic ability or relative linguistic ability must also be used to determine the direction of a nation's economy subject to other considerations, and this is one of the sacred duties of an Anthropologist. For example, the linguistic proficiency of the Japanese in any of the world's leading lingua francas may be limited, and this would necessitate the adoption of home-grown economic development models mired in reality. Anthropologists may play several additional roles in this regard. An example would be designing the course contents for various vocational courses. Automobile mechanic courses may be offered in Hindi, Bengali and Marathi besides many other Indian languages, while it may be foolish to offer Engineering courses in Hindi or other Indian languages at present.

The term 'health' has been defined in many different ways by scholars and organizations. According to the World Health Organization, health is, "a state of complete physical and mental well-being and not merely the absence of disease or infirmity", whereas, Taleoft Parensens defined it as optimum capacity of an individual for effective performance of the role and task for which he has been socialized. Thus, health is a state of soundness of mind and body of an individual in which he is free from any sort of disorder. Health, therefore, helps an individual work towards his own goals, and contributes towards the economy of the nation. Health also emanates from an adequate intake of nutritious food, when people are not undernourished or malnourished. Health and nutrition of individuals are therefore, extremely important for social progress.

Social development also results in the transformation of social institutions in a manner that improves the capacity of the society to fulfill its aspirations. It implies a qualitative change in the way the society shapes itself and carries out its activities, through more involvement in economic planning activities, the adoption of more effective processes or more advanced technology. Social development theory explains qualitative changes in the structure and

framework of society, that help the society realize its aims and objectives. Development can be defined as an upward ascending movement leading to greater levels of energy, efficiency, quality, productivity, and accomplishment. Development therefore requires structured social change, and there must be well-defined motives that drive social change processes and essential preconditions for that change to occur must also exist. The process of change must be powerful enough to overcome all obstacles that arise in the path of such change.

### **Types of approaches in Anthropological Economics**

In Anthropological Economics, we believe the following types of approaches are possible and permissible, taking into consideration the differences in specializations and core competencies of adherents and practitioners of different fields in Economics. These approaches stem from the fact that an Anthropological Economist could only be expected to be well-versed in some fields of Anthropology and Economics, and many practitioners of this field would see their role as coming to an end with the issuance of recommendations or recommendatory guidelines moored in the principles of the field, and implementation guidelines, if mandated. They may be ill-equipped, for example, to deal with the specifics of macro-economic theory. Therefore, the scope of Anthropological Economics will remain restricted, even though it may be at the core of twenty-first century Economic theory:

#### **1. The Ivory tower approach**

In this scenario, the Anthropological Economist works in silos, and is unimpacted by the work of other specialists who may use his outputs or recommendations. He typically possesses a minimal knowledge of the concepts of other fields of social sciences or other branches of Economics. He may be an Anthropologist by training, but may possess knowledge about the interface between Anthropology and Economics including Anthropological Economics. The term 'Ivory tower' is used to describe a state of privileged seclusion from the practical realities of the world. However, in this case, he does involve himself in fieldwork reflecting his core competence in Anthropological Economics, but this approach may magnify the co-ordination overhead considerably, by leading to misunderstandings and co-ordination errors.

#### **2. The handshake approach**

The handshake approach is symbolized by well-defined expectations of different parties involved in the process; hence the term handshake is used. This approach is characterized by well-defined and pre-agreed expectations between all the parties involved, and one party may begin his work where another ends his. This approach would involve common meetings and joint studies, but the rewards may be ample in terms of reduced long-term costs and overheads.

### **3. The collaborative approach**

This approach is marked by a meaningful and an impactful collaboration between all the parties involved throughout the duration of the study, and is representative of collaborative endeavours between various specialists all of who bring together their specialized knowledge for a larger good.

#### **The Anthropological or cultural trigger**

The anthropological or cultural trigger is the trigger used to mark the start of modelling in Anthropological Economics. Such triggers always arise due to changes in behavioural patterns in society, or in a cross-section of society. There are two fundamental types of triggers, and we present them below:

##### **Internal trigger**

In this case, the trigger is purely internal, and is caused by cultural awareness which in turn, may be caused by an information explosion or an information spillover. Change can often be internally-generated through collective action or through the effect of internal change agents. Changes can also be brought about directly or indirectly. Therefore, change agents may be economic or non-economic in nature. For example, an attempt is being made to reform Islam from within in the context of the twenty-first century, and awareness in this regard is being generated by Ex-Muslims such as Ali Sina, Wafa Sultan and Ayaan Hirsi Ali. Hinduism, just like Christianity, has undergone meaningful and positive changes in the Eighteenth and Nineteenth Centuries through the efforts of Raja Ram Mohan Roy and others. These are likely to bring about a series of changes in Islamic society, and such changes are bound to have economic consequences as well.

##### **External trigger**

In this case, changes are induced through extraneous factors. External triggers are almost always extraneous, but they cause changes to culture, or human behaviour, which is then the starting point of change. An example of such change is change brought about through human intervention. Change can often be brought about through government intervention. Government intervention refers to any action or measures undertaken by the government or government agencies to interfere, complement or nullify the decisions made by other individuals, groups or individuals concerning social or economic matters. This can happen through several means such as the following:

1. Governmental support for social change programs and government driven social change programs;



2. Better inclusivity through universal education and better quality of education;
3. Strengthening the legal and institutional framework that can accelerate the pace of social and cultural change;
4. Provision of better infrastructure including physical infrastructure to bring about socio-cultural change;
5. Promoting social inclusivity through the eradication of social evils and bringing about social and cultural change;
6. Technology-enablement by ensuring that the benefits of modern technology are widely disseminated among all sections of the population.

Endogenous changes refer to those changes that are internally-induced and are triggered from within a society, often through innovation or revolution. Exogenous changes refer to those changes that are externally-induced and the agents of change exist outside of the culture. Examples of exogenous changes are those which are triggered by a culture's exposure to other cultures over a period. Contact-driven changes are produced by physical contact between two cultures through mechanisms of war, conquest, annexations, incursions, military expeditions etc. Non contact-driven changes can typically occur even without any kind of physical contact, but typically use other enablers or mediums, often technological. In early civilizations, writing led to far-reaching changes across societies. The invention of the printing press by Johannes Gutenberg allowed new and revolutionary ideas to spread to far-off places, and eventually brought about deep-rooted and wide-ranging changes, both direct and indirect, in many societies. In today's post-globalized world, change is rapid, ubiquitous, pervasive, all-encompassing and is often a way of life.

Changes can also be introduced as a result of collaboration between two or more governments. These can be a national government and a state government, a state government and a local government, or two or more national governments. Intervention can also happen due to efforts by anthropologists, private agencies and NGO's or Non-governmental organizations. In the recent past, NGO's have mushroomed in different parts of India, claiming to provide different types of social services. Many have done extremely good work. Examples of successful NGO's in India include Akshayapatra which feeds schoolchildren in India thereby increasing school attendance, Udaan, an organization which helps destitute children, Helpage India, an organization which seeks to improve the lives of the elderly, and Pratham, an organization which provides education to slum children of Mumbai, and many others. Collaborative and participative approaches can also be used to a great degree of success, and such endeavours may involve collaboration between members of a cultural group and outsiders. This approach has worked admirably in the past and had helped bring about social change in India in the Eighteenth and Nineteenth centuries. All the types of changes described above are likely to lead

to changes in the internal composition of such groups as well as important characteristics. They may also in some cases lead to inter-group mobility.

Integration across Socio-cultural groups and Socio-economic groups is referred to as porosity, socio-cultural integration or socio-economic integration. Porosity can be assessed by means of suitable porosity indices. As a crude rule of thumb, economic integration is almost always higher than socio-cultural integration. This is because economic interactions are more often driven by pragmatism than socio-cultural interactions are.

Degrees of social, cultural and economic integration vary widely among different groups. For example, the Sentinelese are a Pre-Neolithic tribe who live in the Andaman and Nicobar Islands of India. They are one of the world's last uncontacted people and have lived in total isolation for over 60,000 years. Along with the Great Andamanese, the Jarawas, the Onge, the Shompen, and the Nicobarese, the Sentinelese are among the tribal populations of the Andaman and Nicobar Islands. However, the other tribal groups in the region have had some interaction with modern society, and some are gradually embracing modernity. The Toda, Irula and Kurumba tribes of South India have also had a minimal level of interaction with outside groups, and have shown great reluctance and hesitation to abandon their traditional way of life. The Maasai tribe of Kenya in Eastern Africa falls into this category as well.

### **An overview of theories of Social and Cultural change (or Sociocultural evolution)**

In the early days of Anthropology, the view among Anthropologists such as Edward B. Tylor and Lewis Henry Morgan was that cultural evolution was linear and progressive, and took place in sequential stages. Anthropologists then believed that societies passed through common stages from primitive savagery, barbarianism, and reached similar ends, usually culminating in complex civilizations. It was thought that different cultures were at different states of evolution at any given point in time, and less advanced cultures would evolve to higher states in due course. According to Herbert Spencer, "Evolution is a change from an indefinite, incoherent homogeneity through continuous differentiation and integration." According to Edward B Tylor, "The institutions of man are as distinctly stratified as the earth in which he lives. They succeed each other in series substantially uniformly all over the globe, independent of what seem the comparatively superficial differences of race and language, but shaped by the similar human nature acting through successively changing conditions in savage, barbaric and civilized life." By today's standards however, this approach is considered to be over-simplistic, and is synonymous with armchair anthropology and Eurocentric bias. Other supporters of the evolutionary theory in its various incarnations were Henry Maine, James Frazer, W.H.R Rivers, Carlos Seligman, William Graham Summers, William Ogburn, Bachofen, McLennan, Westermarck and A.C Haddon. The era of Evolutionism came to an end with the writings of Franz Boas who

severely criticized the assumptions of evolutionists and pointed out that culture was complex and variegated and that simplistic notions of cultural changes were suspect.

Another important school was the school of Cultural Diffusion. Haviland, Prins, Walrath and McBride (McBride 2011) defined diffusion as 'the spread of certain ideas, customs, or practices from one culture to another'. The Diffusionist school of thought evolved in the late Nineteenth and early Twentieth centuries. Diffusion of traits is the exact opposite of independent invention of ideas. The three most notable diffusionist schools were the British diffusionist school, the German diffusionist school and the American diffusionist school. According to British diffusionists, most aspects of civilization emerged in Ancient Egypt, and then spread to other parts of the world through trade and cultural contacts. Important British diffusionists were Grafton Elliot Smith, William James Perry and W H R Rivers. German diffusionists like Wilhelm Schmidt, Fritz Graebner and Fredrick Ratzel believed that people were un inventive and borrowed a range of developed and readily available ideas from other cultures. American diffusionists, such as Clark Wissler and Alfred Kroeber, believed that traits usually spread from core centres to outlying regions of a culture.

Franz Boas emphasized that variations in cultures across the world were largely shaped by historical factors, and believed that it was useless to formulate any generalized laws. Boas felt that the focus would have to shift to the collection of data so that the laws governing culture, their diffusion, and their variation would emerge only from a study of specific histories. Another notable school was that of Neo-evolutionism. The idea of Evolutionism was revived in the 1940's by Leslie A. White who believed the old idea of Classical Evolutionism was obsolete, proposed changes to the idea to make it relevant. According to White's law of Cultural Evolution, "Other factors remaining constant, culture evolves as the amount of energy harnessed per capita per year is increased, or as the efficiency of the instrumental means of putting the energy to work is increased." However, Leslie White was criticized because he did not take into account environmental, historical or psychological factors that shaped cultural change. Julian H. Steward also divided evolutionary schools of thought into three broad categories which were unilinear, universal and multilineal. According to this categorization, Edward B. Tylor's early theories of cultural evolution were considered unilinear, while White's approach which did not focus on the specifics of a culture and attempted to generalize principles were considered universal like Gordon Childe's approaches.

The writings of Sigmund Freud were indirectly responsible for the establishment the culture and personality school. Other prominent supporters of the 'Culture and Personality' school were Ruth Benedict and Margaret Mead. According to these scholars, culture and personality were mutually inter-dependent. Thus, culture played a major role in formulating personality

traits, and human character. Major works of this school were Ruth Benedict's 'The Chrysanthemum and the Sword' which described Japanese upbringing, and used the "fieldwork-at-a-distance" method, Margaret Mead's 'Keep Your Powder Dry: An Anthropologist Looks at America' (1942) and Geoffrey Gorer's 'The People of Great Russia: A Psychological Study' (1949). Other related theories were based on fieldwork carried out among various North American tribes and New Guinean societies. Ralph Linton, E.A Hoebel and Abram Kardiner also developed theories which proposed that personality types in a culture were formed as a result of cultural values in that society, also called primary institutions, which in turn gave rise to secondary institutions.

The symbiotic approach to socio-cultural change was an approach we had mooted in an earlier paper. From the point of view of their influence, we argued that cultures could be categorized as follows. The process of symbiosis between these cultural systems would therefore determine the global socio-cultural landscape:

1. Dominant or influential cultural systems: Examples of such cultures could include superpowers such as the USA. Factors impacting a culture's dominance could include its technological superiority, cultural hegemony, soft power, economic influence, military influence, population or population growth.
2. Non-Dominant cultural systems: Examples of such systems could include emerging giants such as China and India. Even though such cultures may possess desirable traits, their lack of dominance in the international centre stage due to an absence of hard power or soft power may act as a barrier to such traits from spreading quickly.
3. Fringe or Marginal cultural systems: Examples of such systems could include less important countries such as Nigeria and Tanzania. Such countries are relatively less important from an international perspective, and chances that such cultures can have a major impact on the world at large are low.
4. Closed or Autarchic (Autarkic) cultural systems: Examples of such cultures are North Korea which have practically no cultural or economic connections with the rest of the world. These cultures may also be assessed based on their Degree of Autarchy.

Several factors facilitate the outward transmission of cultural traits or attributes from a cultural unit or area, and these include technological superiority and military hegemony, cultural hegemony and soft power, economic Influence, population and population growth, and several more factors. Several factors facilitate the inward transmission of cultural traits or attributes into a cultural unit or cultural area, and these include technological superiority, perceived superiority, allure or glitz, paradigms presenting solutions to pressing problems, comparison with viable or ready-made substitutes, economy or cost-effectiveness of solutions, utility and practicality, cultural receptivity, etc.

However, there are natural barriers to socio-cultural convergence, and most cultures would continue to retain their own unique differentiating characteristics. Anthony Smith (1991) for example, believes an increase of contacts between cultures does not lead to an annihilation of all differences across cultures. He believes that there is little prospect of a unified global culture, but a set of interrelated cultures, gradually converging, but only upto a certain point.

Cultural transmission may take place through several modes, and these include the push mode, pull mode, push-pull mode, sub-conscious adoption, push-pull-churn for internal adoption, push-pull-churn-feedback for bi-directional influences etc.

Change may also spread through the following modes within the context of a culture or a society:

**Top-down mode:** In this mode, change is promoted by elites. This is the most common mode of socio-cultural change propagation, and most changes barring a few exceptions occur through this mode. This is because elites are better placed to absorb innovations than the rest of the population owing to their social status, economic status or external interconnectedness.

**Horizontal-mode:** in this mode, change is introduced in parallel without regard to geographical considerations or other considerations such as age, economic status or gender. This type of change propagation may be somewhat uncommon in the real-world, and in a pure form, without being complemented by other modes of spread.

**Spatial spread:** Here, change is first introduced in a sub-geography and then slowly spreads to other sub-geographies within a cultural unit. This type of change propagation is relatively common in the real world, perhaps next only to top-down propagation. Changes also often spread from urban areas to rural areas or from developed areas to relatively less-developed regions.

**Bottom-up mode:** Here, change is introduced from the lower end of the spectrum. For example, Dalits, or outcastes, orchestrated social revolution in India, and changes were imposed on elites in due course.

**Changes due to Mass mobilization:** In this mode which is more common than the strictly horizontal mode, changes are introduced through popular revolution or awareness, and gradually imposed on the non-adherents, spreading both upwards and downwards, and to other geographies in the process.

**Generational Change:** In this mode, change is introduced among younger generations of the population. Changes may or may not be adopted by older generations. Complete or significant change therefore, occurs only when the older generations have died off. The differences in values of traits and attributes between younger and older generations may be quantified as a 'generation gap' which is an ingrained difference in mean, modal or individual values of cultural traits or attributes between generations attributable to generational socio-cultural differences.

**Other types of Dimensional spread:** In this mode, change may be introduced from other specific dimensions such as gender, community etc. A classic example in this regard is the rise of feminist movements in the West. In many situations, changes may also be introduced from a community and may then spread to other communities. Other examples include changes introduced from one religious community to other religious communities.

**Functional spread:** In this mode, changes introduced in one function of a society, spread to other functions. For example, changes introduced to the education sector, may trigger changes to other aspects of society due to positive externalities.

**Multi-modal spread:** Here, changes are introduced through several of the modes described above.

### **Societal orientations or cultural orientations**

In an earlier paper, we had described the Seven Societal or Cultural orientations as described below:

#### **Past-orientation versus future-orientation**

Past-orientation and Future-orientation is the relative emphasis placed by a society or culture on its past, present or future. Future-orientation is often associated with characteristics such as planning, foresight, personality development and also with other personal attributes such as individualism. An over-emphasis on the past may lead to the perpetuation of the ideals of the past and may impede both material and non-material progress. Globalization usually leads to the multiplication of horizontal and lateral factors, thereby weakening vertical factors, thereby inducing change. We may also note that Western societies have been predominantly future-oriented since the dawn of Enlightenment. Thus, globalization and modernization gradually make more conservative societies future-oriented as well.

#### **Inward-looking cultures versus outward cultures**

Some cultures may be more outward-looking than others, and many have traditionally been so. This may be called the internal or external orientation of society. The presence or absence of cultural elitism, key political and cultural institutions as well as the level of physical, educational and social infrastructure and the general intellectualism also play a role in determining the orientation of society. Remediation may be brought about by means of changes in the education system through culturally appropriate pedagogical techniques or an improvement in social or physical infrastructure. A change in a society's orientation from an internal orientation to an external orientation increases its cultural receptivity and brings about attendant benefits. A Xenophobic culture is one which has an inherent suspicion or aversion towards other cultures. In some situations, Xenophobia may manifest itself in other forms such as condescension towards other cultures, or a desire to maintain cultural or racial purity. Xenophobia may arise due to many reasons, one of them being ethnocentrism, though there could be several other causes such as autarchy (autarky), cultural isolation or ignorance of the outside world. This view is strongly associated with inward orientation, and sometimes with past-centrism. In some other cases, xenocentrism may be observed, though this may not always be associated with positive consequences, and a culture may swing rapidly from one extreme to another. This may also be triggered by a disenchantment with a given situation generating a yoyo effect before a stabilization is effected. Examples of Xenophobia have included Islamophobia seen in the recent past, and the earlier Anti-Semitism of Nazi Germany. Xenophobia has also been often associated with mid-twentieth century Japanese culture and the recent Hindutva movement of India.

#### Rigid versus flexible cultures

Cultures may also be rigid or flexible in their orientation. Flexible cultures are those with less cultural and intellectual baggage, and are more flexible to change. Cultures which are flexible in some respects, may be rigid in some other respects, and it may be necessary to perform a thorough analysis at the level of a cultural element, by linking it to a cultural taxonomy.

#### Individualistic versus collective cultures

Some cultures like the USA may be more individualist, while some others like the erstwhile and the now-defunct USSR always emphasized collectivism of thought and statism through policy. Most other cultures can be placed in a continuum between these two extremes, and the merits and demerits of both points of view are still unresolved.

#### Material and non-material orientation

Some cultures like the USA are considered to be more materialistic, while other developed countries like Japan are considered to be less so. Most other cultures can be placed in a continuum between a material orientation and different non-material orientations such as religious or spiritual orientation, and the merits and demerits of different types of orientation are still unresolved. This would naturally determine wealth creation, and would serve to explain why some cultures attach more money to material progress.

#### Contentment versus innovation

Some cultures do not tend to effect changes to the status quo easily, while some others pursue a relentless quest for change and changes in the status quo. This orientation would determine a culture's appetite for innovation, and would be commensurate with its innovation indices. This metric may, however be affected by a culture's past or future orientation too, and in some respects, all the six are inter-related.

#### Rational-orientation versus Non Rational-orientation

In a rational society, less reliance is placed on myths, legends, superstitions, historical tradition etc. Most non-rational societies could be expected to evolve into rational societies in due course, and the Cultural Anthropologist may have an important role to play here.

Alternatively, other approaches such as Hofstede's cultural dimensions which is based on a facto analysis may also be used. This approach was developed between 1967 and 1973, and involves a study of dimensions such as Power Distance Index (the degree to which the less powerful members of organizations and institutions (for example, the family) accept and expect that power is distributed unequally), Individualism vs. collectivism (the extent to which people in a society are integrated into different groups), Uncertainty avoidance index (a society's tolerance for uncertainty in which people accept or avoid the unexpected, unknown, or deviation from the status quo), Masculinity vs. femininity (masculinity refers to a preference for achievement, heroism, assertiveness and material rewards for success. Femininity refers to a preference for cooperation, modesty, caring for the weak and quality of life), Long-term orientation vs. short-term orientation and Indulgence vs. restraint (This dimension is essentially a measure of happiness and whether or not simple joys are fulfilled, and was added in the year 2010). Shalom Schwartz, an Israeli researcher, proposed six cultural values in three pairs, which were Embeddedness (High value to tradition) versus Autonomy (Individuals have high control over their choices), Mastery (success through individual action) versus Harmony (People ready to accept their place in the world) and Hierarchy (Emphasis on roles) versus Egalitarianism (Emphasis on equality). Trompenaars' model of national culture differences is a framework



for cross-cultural communication developed by Fons Trompenaars and Charles Hampden-Turner. This model of national culture differences has seven dimensions. These are: Universalism vs. Particularism, Individualism vs. Communitarianism, Neutral vs. Emotional, Specific vs. Diffuse, Achievement vs. Ascription, Sequential vs. Synchronic, and Internal vs. External control.

### **Cultural readiness**

A change is an alteration, difference or modification in a situation, object, organism, or environment through time. Social change, cultural change and socio-cultural change are interrelated and often used synonymously. According to a definition provided by Kingsley Davies: "By social change is meant only such alterations as occur in social organizations, that is, structure and functions of society." MacIver and Page state, "Social change refers to a process responsive to many types of changes; to changes in the manmade conditions of life; to changes in the attitudes and beliefs of men, and to the changes that go beyond the human control to the biological and physical nature of things." Thus, cultural and social changes are universal and take place in almost all societies throughout the world. Such changes are also continuous and temporal, closely reflecting human nature. According to Gillin & Gillin, "Social changes are variations from the accepted modes of life; whether due to alteration in geographical conditions, in cultural equipment, composition of the population, or ideologies and whether brought about by diffusion or inventions within the group."

Cultural Receptivity reflects a culture's desire for change and progress, and how it views other cultures and components of other cultures not forming a part of it. Even a culture which is initially not receptive to ideas of an external origin, may undergo positive changes in due course, and may become more receptive to change. Most cultures and societies today are receptive to some degrees, as symbols of science and technology have permeated the globe, as also have cultural icons associated with the world's more dominant cultures. Conrad Arensberg and Arthur Niehoff describe cultural borrowing as the sharing of ideas and techniques across cultures, though not often in wholly unmodified form. Often, external ideas are thoroughly internalized, even heavily modified in some cases, and used in ways that the society and its people deem fit. Cultural readiness is therefore, often a pre-requisite for cultural change.

### **More definitions at this stage**

Let us now proceed to introduce some more definitions at this stage:

### **Cultural variables**

Cultural variables are those variables that tend to vary (often widely) based on cultural attributes. Examples of such variables include birth rate, propensity to consume a certain good with a rise in income etc. Cultural variables are central to Anthropological Economics, and are core differentiations between cultures. They would often be at the heart of any developmental strategy, and serve as core differentiators. They would also need to be taken into consideration while performing any SWOT analysis of different cultures.

### **General or Non-cultural variables**

General or non-cultural variables are those variables whose variability does not by and large depend on cultural factors, and includes variables whose values do not widely vary based on culture. It may be difficult to identify and isolate non-cultural variables in the real-world. However, such variables may often be treated as non-cultural variables for the purpose of an analysis. Examples of such variables could include total fertility rate at a certain level of education etc., as TFR's have often tended to converge in the recent past. Some cultural variables may also be transformed in due course into general variables, due to a process of cultural homogenization, and this process may often be irreversible.

### **Mind-orientation**

The theory of mind-orientation is one way of assessing latent and manifest social and cultural changes in society. Mind-orientation refers to the thoughts, beliefs and values a person fills his mind up with, and also how he leverages them to determine his attitudes in life. These will affect his actions, and his direction and purpose in life greatly. Mind-orientation is shaped by factors such as (a) parenting and upbringing (b) peer-pressure (c) education and schooling (d) The effects of the multi-media (e) societal constraints and restrictions including a multitude of factors such as language, religion, cults and ideologies (f) socio-economic status. In most scenarios, parenting and upbringing, peer-pressure, education and schooling etc., are much stronger than say, the multimedia, and these influences manifest themselves at an earlier age. Factors such as parenting and upbringing, peer-pressure, education and schooling etc., are also determined by the values held by religious, linguistic and cultural or social groups which in turn impact parenting, peer-pressure and other factors determining mind-orientation. However, the extent to which religious groups, social or cultural groups and linguistic groups exert influence may vary from context to context. In some cases, the sway held by religious groups, social groups, cultural groups, or linguistic groups may be low, marginal or non-existent. In some other cases, their influences may be relatively high. In many cases, other groups can also exert powerful influences, examples being the values of an external or third-party culture. Other secondary groups may also affect an individual's mind-orientation. The mind-orientation of different groups is also determined by the global socio-cultural landscape, and this is determined by the process of cultural symbiosis that we described. Thus, mind orientation is

interwoven with culture and society, and even in the age of globalization, an individual's mind-orientation is impacted by the society's values, preferences and constraints. Thus, the collective and general mind-orientation of individuals may change relatively slowly, and cannot change beyond a point. As a result of this, an individual may acquire and retain thoughts that fit in with his mind-orientation, and tend to sub-consciously ignore those thoughts that do not fit in with his mind-orientation. Thus, an individual's mind-orientation impacts many aspects of his life, such as his economic decision-making, his innovation, his creativity and several other factors.

However, there can be exceptions within a society. Some societies encourage and promote personal and individual creativity, while some others frown upon them. This is why some societies are more tolerant of geniuses, prodigies and mavericks than others. In any society, individuals may be classified into conformists, partial conformists, non-conformists, and outcasts. At the same time, a society's values also keep changing, often triggered by changes to individuals' values and mind-orientation. A society's values also restrain individuals at times. Thus, the relationship between an individual's values and mind-orientation and the society's values, more and norms is extremely interesting and worth exploring at a greater level of detail.

The following are the basic Mind-orientation types which may be further subdivided into several sub-types:

- Family orientation: In this case, the individual's efforts are primarily geared towards the satisfaction of familial needs. This is perhaps the most common type of mind-orientation demonstrated by a vast majority of people in most parts of the world, particularly in traditional and conservative societies such as India. Individuals with familial orientation may be good in making a living through various means, but these efforts are typically geared towards satisfying the needs of the family, and are not a goal or an end by themselves. A Family mind-orientation has several tangible benefits which include the preservation and transmission of culture.
- Employment or Business orientation: In this case, the individual's efforts are primarily geared towards employment or business. I.e. satisfaction of livelihood needs, and all other efforts are subservient to these. Such orientations are common in many parts of the world, including developing and developed ones, and in such cases, livelihood is a passion or calling in life. An employment or business orientation has several economic benefits for society, and will lead to a greater well-being for society as a whole.
- Individual mind-orientation: In this case, the individual tends to be self-centric in his pursuits. This type of orientation is characterized by a great emphasis or satisfaction of individual goals and aspirations. He may also attach a great deal of importance to his own personality or image makeup.

- Societal orientation: This type of Mind-orientation tends to put the well-being and needs of society above individual and all other needs. This type of mind-orientation is relatively rare in most societies, in spite of the fact that this type of mind-orientation has some tangible benefits to offer to society.
- Religious, spiritual or philosophical orientation: In this case, a great deal of importance is placed on religious, spiritual or philosophical needs often at the expense of all other needs.. Religious, spiritual and philosophical orientation beyond a certain degree of measure may be counter-productive and lower the well-being of society.
- Intellectual or creative orientation: In this type, a great deal of importance is placed on intellectual needs and creativity. This type of mind-orientation is relatively less common particularly in traditional or conservative societies, and may be the exception rather than the norm in most advanced societies. The exact opposite of this kind of orientation is regimentation and adherence to bureaucracy or a procedural orientation, and this will stifle creativity and imagination in the ordinary course of events.
- Militant orientation: In this type of orientation, individuals try to fight and protect society from external threats and dangers. This type of mind-orientation may be present to some degree in advanced societies, but may be more common in tribal and feudal societies which are constantly at war with each other.
- The Anarchist or the queer man: This type of mind-orientation may not be a bona fide category per se but a residual type and may be characterized by a partial or complete disorientation on some or many fronts. Many would not accept this as a mind-orientation and this may be a result of wayward personal experiences or a worldview shaped by cognitive dissonance.
- Other types of Basic mind-orientation: Other types of basic mind-orientation may also defined with a proper justification, but most may be subservient to and slotted into the above categories.

It will also be useful to plot an individual's primary and his secondary mind-orientation, and an individual's mind-orientation is usually composite. It may also be necessary to assess his performance on various fronts, and in relation to the different and varying roles he may come to play in his life. The statistical relationships between various mind-orientations also need to be probed both within the context of an individual, a society or beyond, and the most effective way to do this is through the concept of mindspace. The concept of thought worlds is linked to both mind-orientation and mindspace, even though it may cover a wider set of issues, including those which is not included in an assessment of mind-orientation. All the three are related and can be measured through suitably designed techniques, unlike the idea of personality which is much more abstract, and to the Anthropologist working on the field, may be of limited value. The inter-relationships between culture, mind-orientation and thought worlds are therefore, deep-rooted, fundamental, comprehensive and multi-directional enough to be of great

practical and utilitarian value. Thus, thought worlds, which cover the breadth of the human experience, can be assessed accurately on the field through questionnaires or interviews and this approach has practical uses in economic decision-making. Resultantly, the economic value of each type of mind-orientation can be computed in different contexts given that each type of mind-orientation can be associated with different levels of motivation, different economic actions, different economic roadmaps, or visions for life.

## **Mindspace**

We will also further describe the concept of 'mindspace' in this paper, and we believe this is a simple but effective tool with innumerable tangible benefits. The concept of 'mindspace' originates from the idea that every individual has limited time at his disposal, or limited mental bandwidth to focus on a large number of issues. He can only devote his time and attention to a limited number of activities at a given point in time or in an elapsed duration. Thus, if he spends time on a particular activity, it reduces the time he has for other activities. If an individual spends more time watching television, this reduces the time that he has for reading. Thus, the popularization of television has adversely impacted reading habits. Let us consider another example. The advent of the internet has led to the decline of television or cinema as a mode of entertainment. It has also led to the decline of reading for pleasure, but has boosted access to information. Thus, the internet and the television have led to a general decline in people's reading abilities. However, the internet may have boosted the demand for basic, functional skills in English and the popularization of many technical words among large sections of the population in India. This approach can be modeled for economic activities too. For example, a knowledge or awareness of a new form of economic activity, may automatically bolster the demand for it, phase out the demand for more traditional forms of economic activity, and bring about attendant benefits in society. Likewise, an increase in literacy levels or access to new knowledge brought about through the internet may cause a change in economic activities in a context.<sup>43</sup>

Thus, this approach may be examined from three dimensions. The first is self-driven re-orientation which does not involve any influence or action by third-parties. The second is re-orientation induced by third parties typically through some form of activism. The third is peer-driven re-orientation which may be a sub-conscious process. Peer-driven re-orientation is a more interesting and a more potent tool because it allows us to induce strategic shifts through awareness creation. This will allow changes to spread through society horizontally, and through relatively minimal effort. At times peer-driven changes may be due to a 'follow the herd' mentality or a desire to 'keep up with the Jonases'. Mindspace shifts may also be approached from another perspective. We would like to refer to the first type as horizontal, where shifts are

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<sup>43</sup> Social Change and Modernity, Edited By Hans Haferkamp and Neil J. Smelser, University of California Press, 1992

brought about through peer-interaction and changes in society. The second type of classification is Generational where changes in mindspace are analyzed from generation to generation. The third type is an individual-level temporal shift where changes occur in an individual over a period in time. A fourth way of analyzing mindspace is by segmenting society into different strata based on education, income level, socioeconomic parameters or any other suitable criteria, and then analyzing the changes in the composition of society. This may be called a group-level temporal shift. Mindspace is however, more of a zero-sum equation; if something gets in it marginalizes or eliminates something else; conversely, if something is consciously or sub-consciously eliminated, it will eventually make room for something else. This is why mindspace is a connecting thread that connects other elements of a gigantic jig-saw puzzle, and is a pre-requisite for comprehending individual and societal change.<sup>44 45</sup>

This approach not only allows us to analyze the underlying causes of change but also to predict cultural shifts due to disruptive technologies or other changes with greater precision. It also allows us to prepare a cause and effects diagram with a great degree of precision by analyzing all downstream effects of any decision. Consequently, it also allows us to make course corrections wherever they are required in the interests of society by taking proactive measures.

### **Thought worlds and worldviews**

Thought worlds, which co-relate to mindspace and mental make ups, and can be much more easily assessed, must be co-related with cultures, subcultures, socio-cultural groups, socio-economic groups, occupational groups, and individuals. These would determine individual or group economic behaviour or performance. The assessment of an individual's thought worlds must be comprehensive and complete and must be presented in unambiguous terms. Any ambiguities must also be suitably quantified and laid threadbare. There is an underlying structuralism and functionalism in thought worlds, and it would be illustrative and instructive to build taxonomies and hierarchies of thoughts and ideas that make up an individual's thought world much in the manner of a cultural taxonomy. Thus, hierarchies of typical or modal thought worlds in cultures, subcultures, the aforesaid groups and variations between individuals can also be accomplished.

Another related concept is that of a worldview. A worldview may be defined as a fundamental cognitive orientation of an individual or a group of individuals in a society or a society as a whole encompassing the whole of the individual's or society's knowledge and points of view. They are subsets of thought worlds, and are shaped by them. Even though worldviews may

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<sup>44</sup> Sociology: A biographical approach Peter L. Berger and Brigitte Berger

<sup>45</sup> Creating Social change: Edited by Gerald Zaltman, Philip Kotler, Ira Kaufman

appear to be superficial, they can often be assessed and captured much more readily than thought worlds through a wide variety of investigative techniques.

### **The Vertical-horizontal factors approach**

We also recommend the Vertical-horizontal factors approach for its simplicity, power and elegance. This approach involves plotting all Vertical factors, which in everyday language refer to historical factors or historical, cultural or intellectual baggage, and those aspects of a culture that are passed on from generation to generation and horizontal factors which refer to changes introduced from other cultures or subcultures or other dimensions of the same culture. In other words, horizontal forces may be generated from either within or outside the culture. Vertical factors may also be referred to as change-inhabiting factors while Horizontal factors may be referred to as change-inducing factors. An extension to this model could include splitting up of horizontal factors into horizontal and lateral factors. Lateral factors or diagonal factors, are those that emanate from sources external to the culture in question. A low incidence of vertical factors coupled with a high incidence of horizontal factors is representative of a change-conducive environment. In such cases, change-friendly forces override vertical forces easily. A low incidence of vertical factors coupled with a low incidence of horizontal factors on the other hand, produces very little change. Such societies usually are lacking in initiative, change or direction. A high degree of vertical forces combined with a low degree of horizontal forces produce a society that does not want to or is or unable to change. On the other hand, societies with a high incidence of vertical and horizontal factors are characterized by a clash in values. While such societies may inevitably change, changes are bound to be painful.

Vertical-horizontal analysis can also be performed using a lifecycle approach. In this case, all the vertical and horizontal forces an individual is subjected to during his lifetime are identified and the impact on his psyche and mind-orientation assessed. Another potentially useful tool may be Generational analysis which analyses how cultural traits or attributes are transmitted from generation to generation.

### **Cultural limits**

Cultural limits refer to the internal limits set for growth based on a culture's constraints, orientation, and proclivities. It is also determined by the sum total of the attainments of different kinds of individuals constituting that society. These limits are set either relatively, ordinally, or in quantified terms by Anthropological Economists after taking into consideration, the constituents of the group, and a study of various mean and model values and outliers. Limits typically comprise of short-term limits, medium-term limits, and long-term limits. These limits are also often set for socio-cultural groups and socio-economic groups, and it is expected that computations would be realistic, given the fact that they would form the basis for

economic expectation. These can also be first computed at a micro level or a macro level, and then extended for the cultural group as a whole. These limits may also be determined by endogenous or exogenous constraints. These may also be aggregated or derived functions which may be arrived at through constrained optimization; for example, linguistic ability of the citizens of a country may be one of the inputs for computing cultural limits. These limits would then form the basis of a temporary workaround, or a long-term remediation plan. In some cases, these would form the basis of realistic expectations, and economic models may need to be recast. There would of course be wide variations between individuals, and such models could even help explain why some cultures produce more millionaires and multi-millionaires while some other cultures produce less millionaires and multi-millionaires.

### **Anthropological limits**

Anthropological limits to growth would often be defined at a pan-human or a global level and would be based on a careful study of the components of human nature. Even though these would appear to be somewhat idealistic, they would constitute some kind of a threshold value, and would serve as a benchmark for various cultures and groups. These could also likewise be computed after taking into consideration, mean values, median values, outliers etc., but would usually be represented by a single derived function. Anthropological limits are also useful to calculate unfulfilled anthropological potential, both globally and in a specific culture. We must also bear in mind the theory of increasing incremental effort (or diminishing marginal Anthropological returns) which states that cultural remediation becomes more and more difficult beyond a point, and will yield less and less returns.

### **Anthropological or cultural Equilibrium**

Equilibrium is a state of complete balance and harmony where all opposing forces are completely neutralized or counter-balanced. The idea of equilibrium is found in many branches of both the hard and the soft sciences, and is widely used in microeconomics as well. An equilibrium in a system is also a state or condition that will continue indefinitely as long as exogenous factors remain unchanged—that is, as long as no outside factor upsets the equilibrium.

The following factors, in our view, represent a state of anthropological equilibrium, though this does not purport to be a complete list; and other researchers would be well-advised to add more. From the point of view of Anthropological Economics, equilibrium would largely connote a state of economic equilibrium, but would also take into consideration other factors.

- Complete structural harmony
- No friction between individuals in the group



- Satisfaction among individuals with the existing state of affairs
- Fulfilment of a minimal level or economic needs
- Fulfilment of a minimum level of social and cultural needs

Equilibriums may change over a period, usually through extraneous agents or technological change, and a new level of equilibrium may be achieved. We may refer to these as the old equilibrium and the new equilibrium, or equilibriums 1,2,3, etc. For example, a new equilibrium may have been reached in India after the eradication of the caste system, or the introduction of the automobile in the USA. Minor changes happen all the time, and as it is aptly said, there is nothing constant except change.

### **Sociological ninety ten rules**

The Sociological Ninety ten rules that we propose, are derived from the premise that all social sciences like sociology, anthropology and economics are soft and inexact, and stand in total contrast to the hard and exact sciences like physics and mathematics which are characterized by rigour, precision and exactitude. A high degree of precision, objectivity and certainty is not possible in the social sciences, even though they may use mathematical models extensively or use statistical techniques. Therefore, for every rule in social sciences, there are bound to be several exceptions. Laws in social sciences are also based on the premise of 'statistical laws', which stand in marked contrast to 'causal laws'. A causal law states that event B is caused by event A and therefore, event B will always follow event A. Statistical law is based on the notion that event B will "probably" follow event A in most cases, but there could be exceptions, and situations of total conformity are rare in the real-world. Just as distributions are fitted into a bell-shaped curve, there could be many types of observations here: Uni modal or single nucleated where only one type of observation is noted, bi modal or bi nucleated where two types of observation are noted, multi modal or multi nucleated where many types of observations are noted, uni modal or single nucleated with outliers, bi modal or bi nucleated with outliers, multi modal or multi nucleated with outliers, uni modal or single nucleated with significant and exceptions, bi modal or bi nucleated with significant and exceptions, multi modal or multi nucleated with significant and exceptions. From our perspective, these are known as cultural variations and cultural exception. The name 'Ninety ten' is only a handy nomenclature. Real world exceptions could be five per cent, ten per cent, or take on any other value.

Variations within socio-cultural groups, socio-economic groups, and occupational groups must be assessed and sociological-ninety ten rules must be borne in mind as well. This may be a basis for splitting up such groups if necessary, and the man in the field must take a call here. Thus,

heuristics are extremely important in Anthropological Economics, and rule-based reasoning and case-based reasoning must be used.

### **The potential equal value of human life, unequal value of investment in human welfare theorem**

We propose the potential equal value of human life, unequal value of investment in human welfare theorem. This is based on the idea that cultural and social barriers notwithstanding, all humans theoretically have the same potential. The concept of race is now obsolete, and has now been replaced by dynamic definitions of ethno-biological identity. Early definitions of race by Hooton (1926) or Montagu (1942) are therefore either obsolete, or not comprehensive enough. Later researchers such as Garn (1960), Buettner-Janusch (1969), and Hulse (1963) have defined races as breeding or Mendelian populations. Biologists and Anthropologists such as Ashley Montague and Julian Huxley eventually rebelled against the idea of races, and Deniker (1900), and Huxley and Huddon (1936) adopted the idea of an ethnic group. Of late, the idea of a dynamic genetical theory of biological identity using concepts such as social selection, sexual selection, hybridization, mutation, isolation, and random genetic drift have become popular. Others such as Livingstone (Livingstone (1962)) have pointed out that the idea of race is not compatible with the dynamic concept of natural selection, and have proposed the concept of clines instead. It would therefore be dangerous to tread on murky waters; while the interests of science undoubtedly come first, such paradigms must not be allowed to be misused unless they can be comprehensively or irrefutably be proven, lest they lend themselves to misuse. Therefore, from our perspective, all lives have an equal potential value.

We now make oblique references to paradigms that have been criticized for having promoted contrary ideas, even though they are completely outside our radar. For example, Negishi weights were developed by Takashi Negishi, a Japanese economist. These are often referred to as Negishi welfare weights or Negishi Social Welfare function. Negishi welfare weights were used in the Kyoto Protocol and other macro-economic analyses. However, these are controversial because they embed into economic analyses a varying and unequal price of life, the cost of averting a fatality, or the marginal cost of death prevention. His approach has been criticized by Elizabeth A. Stanton and others.

However, from our perspective, spending on different welfare paradigms can never have the same incremental utility to different individuals, and the efficacy of such spending patterns can be assessed through the gamut of tools available in the field of anthropological economics, such as trickle-down analysis, trickle-up analysis, and spillover analysis.

Therefore, we believe in the law of numbers, or what we would like to call  $m \times n$ . In this case,  $n$  refers to the number of individuals, and  $m$  is the incremental income per individual. Thus,

whenever  $m \times n = I$  (Constant), a higher value of  $n$  must always be preferred, as it will help uplift a larger number of individuals, and help create wealth much more rapidly in the short-term.

Therefore, we propose the theory of Anthropological distance which states that “all other things being equal, meaningful schemes to pull the poorest people out of poverty benefit the economies the most in the long-term by providing a robust basis for growth.”

### **Some Core models in Economics**

We review some core models in Economics below, and these can have a bearing on the postulates of this paper:

#### **Circular flow of economic activity**

The most common problem in most economies is that of scarcity which is solved by three institutions or decision making agents of any economy. They are households or individuals, firms and government organization. These are engaged in the production, consumption and exchange of goods and services. These three decision makers act and react in such a manner that all economic activities move in a circular flow. Households may be single-individuals or groups of consumers making decisions regarding consumption. They aim to satisfy the wants of their members with their limited resources. They may also possess land, labour, capital, and entrepreneurial ability which they sell for income which may be in the form of rent, wages, income and profit. The term firm is synonymous with producer in economics. Firms manufacture goods and services in economy, employ factors of production (land, labour, management and capital), and make payments to their owners. The output depends on a production function. The government also plays an important role in most economies, though the degree of involvement may vary. In a purely capitalistic economy, the role of a government is limited to creation and maintenance of a legal framework, and increasingly, the provision of social welfare. However, in communist countries, the role of a government is much more extensive. Thus flows between households, firms and government agencies are continuous, inter-related, and inter-dependant. Where a government is not involved, it is referred to as a Two-sector economy, and where a government is involved, it is referred to as a three-sector economy. A four-sector economy is an extension of the three-sector economy, where the rest of the world is also involved.

#### **Alfred Marshall's Cardinal Utility Analysis**

As per this model, which is one of the oldest theories of demand, the price of any product depends on two very essential factors, namely the demand for that good, and the quantities of that good supplied. This would also be determined by several factors such as the individual's income, the prices of related goods, and the tastes and preferences of individuals. However,

the price of the product is by far the most important determinant of demand. Therefore, this approach seeks to establish a co-relation between demand, price, and quantity supplied. This approach which assumes the cardinal measurability of utility, the hypothesis of independent or additive utilities, and the constancy of the marginal utility of money, was severely criticized, and other approaches such as the Indifference curve analysis, Samuelson's Revealed Preference theory, and Hick's Logical Weak Ordering theory and Consistency postulate or Weak Axiom of revealed preference (WARP) have been propounded.

### **Indifference Curve Approach**

The indifference curve method was developed to replace the Marginal Utility Analysis of Demand which states that the marginal utility of a good decreases as more or more units of the goods are consumed. Beyond a certain point, the marginal utility of the good may become negative. The theory of Marginal Utility is related to the Equimarginal principle which states that a consumer derives maximum utility from goods when the marginal utility derived from the last dollar on all the goods is the same. The Indifference Curve Analysis which adopts the ordinal notion of utility, represents all those combinations of goods which give the same satisfaction to the consumer. Thus, all combinations of goods lying on the Indifference curve are equally preferred by him. A complete description of a consumer's tastes and preferences are represented on an Indifference map which consists of a series of Indifference curves. This also related to the Marginal rate of substitution which is the rate at which the consumer is prepared to exchange Goods X for Goods Y, and this Marginal rate of substitution diminishes as more and more of Good X is substituted for Good Y. A consumer therefore is said to be in equilibrium when he buys such a combination of goods which leaves him with no tendency to rearrange the combination of goods.

### **Income consumption curve**

Income effect on the consumption of goods can be either positive or negative. Income effect for a good is said to be positive when the consumption of the good increases with an increase in the level of income. However, in the case of some goods, consumption decreases as income increases. These goods are known as inferior goods because as his income increases, an individual would substitute inferior goods with superior goods. An example of such a good would be low-quality rice in an Indian context. A Nineteenth Century German statistician Ernet Engel carried out an empirical study of family budgets to draw conclusions about patterns in consumption expenditure at different levels of income. According to his study, as the income of the family increases, more money is spent on luxury goods and less money on essential food items. The curve showing the relationship between levels of income, and quantity of goods purchased is popularly known as Engel's curve. While carrying out such an analysis, the Hicksian Substitution effect and the Slutsky Substitution effect are also taken into consideration. In the

Hicksian Substitution effect, for example, price change is accompanied by a change in income such that the consumer remains on the same financial footing as before. This is also known as Compensating Variation in Income.

### **Price Elasticity of Demand**

When the price of a good rises, its demand falls, and vice versa. This is known as the Law of Demand. This law indicates the direction of change, but does not tell us anything about the quantum of change. An idea about the quantum of change can only be obtained by computing the price elasticity of demand. Price elasticity of demand is defined as the ratio of the percentage change in quantity demanded to a percentage change in price. In some cases, this is measured using the total expenditure or total outlay method. The magnitude of change in demand with respect to change in its price varies for different goods, and is referred to as elasticity. Some goods are therefore elastic, while some others are inelastic. Elasticity is also sometimes divided into Point Elasticity and Arc Elasticity. Point elasticity refers to elasticity at a point on the demand curve where the changes in price and the resultant quantity demanded are infinitesimally small. However, when the changes in price are quite large, arc elasticity is used by measuring elasticity over an arc on the demand curve. Another concept is the cross-elasticity of demand. In such a case, the demand for two goods are related to each other in such a way that when the price of one good changes, the demand for the other good also changes. The price elasticity of demand is often determined by the availability of substitute goods, or near-substitutes. Another concept is that of complementary goods, and in this case, the use of one good is complementary to that of another.

### **Supply Demand analysis for Price determination**

Demand and supply analysis is the study in Economics of how different forces interact to determine prices and quantities of goods sold. Prices therefore, reflect both the value to the buyer and the cost and the profit to the seller. The supply curve depicts how the quantity of a good offered for sale changes as the price of the good changes. If the price increases, firms are more willing to produce and sell because they will make a higher profit. Likewise, if sales price remains constant and production costs fall, firms can produce goods for a higher profit. There is also a relationship between the quantity of a good that consumers are willing to buy and the price of the good. The lower the price, the higher the quantity demanded. The quantity demanded may also depend on other variables, such as income, the economy, and the prices of other goods. For goods other than inferior goods, the quantity demanded increases when income rises. Thus, even though demand for goods decreases as the price increases, suppliers will not be willing to supply below a certain price. Therefore the price settles at a certain level favourable to the two prices, and this is known as the equilibrium price. The quantities will also be resultantly determined for this equilibrium price.

## **Samuelson's revealed preference theory**

Professor Samuelson's Revealed Preference theory seeks to explain customer demand from his actual behaviour under various price demand situations, and is one step closer to our philosophy than the Marshallian Cardinal Utility of Demand and the Hicks Allen Indifference curve of demand. Samuelson's approach seeks to provide a behaviouristic explanation of consumer demand, and is widely described as behaviourist ordinalist because it uses both the behaviourist method, and the concept of ordinal utility. Thus, there is a strong ordering of goods and combinations of goods that is revealed consistently, and this is used to construct his preference scale.

## **Core models in Anthropological Economics**

We now present some core models in Anthropological Economics below, and as such most of these are extensions or modifications of existing models. As such these would constitute a combination of endogamous, and exogamous approaches, and the cultural basis of a society is taken into consideration along with macro-economic and global realities:

### **Input output analysis**

In Economics, an input–output model is a quantitative economic model that shows the inputs and outputs of different sectors of the economy and the interdependencies between different sectors of the economy or in some cases, different economies. For example, agriculture consumes fertilizer and other inputs. It also consumes labour. The kind of labour consumed (whether unskilled, semi-skilled, or skilled) and their income levels can also be worked out and used in a trickle down analysis, and to assess what kinds of goods these workers will consume, and how this will in turn impact economic activity. This can be done by identifying different types of inputs for different economic activities, and by considering factors of production as well. Wassily Leontief first developed sophisticated input output models in the late 1940's and the early 1950's which could work for five hundred different industries or more in addition to the open sector which only consumed resources, and his work earned him the Nobel Prize in Economics. This model was applicable for any equilibrium economy with constant returns to scale, and one industry producing only one product, but many similar models have been developed ever since. Leontief was heavily influenced by the ideas of Karl Marx and Jean Charles Leonard de Sismondi. Leontief's model depicts inter-industry relationships within an economy, showing how output from one industrial sector becomes the input to another industrial sector using a matrix layout. In the inter-industry matrix, column entries represent inputs to an industrial sector, while row entries represent outputs from a given sector. Each column of the input–output [matrix](#) shows the monetary value of inputs to each sector and each

row represents the value of each sector's outputs. This model can even be applied where a large number of inter-dependant industries are present, and is an invaluable aid in socialist or centrally planned economies. In the eighteenth century, Francois Quesnay had developed a cruder version of this technique called "Tableau Economique", and Leon Walras's work "Elements of Pure Economics" was a forerunner of Leontief's later work. Alexander Bogdanov, L. N. Kritsman, T. F. Remington, Vladimir Groman and Vladimir Bazarov also made important contributions to this technique.<sup>46</sup>

In this kind of Input-output analysis, the quantities of inputs used in relation to output are also taken into consideration by mapping input quantities to output quantities. Thus, producing an automobile may require different materials in different quantities, and this kind of analysis will help identify the increase or decrease in different raw materials and intermediary goods as production of automobiles increases or reduces. The end users or consumers are often large in number, and may be culturally or economically differentiated. In some cases, end consumers may be just one or a few in number – monopsony or oligopsony.

However, our approach recommends several important changes to this model, and is only very loosely based on this approach:

- (a) Culture-driven modelling is mandatory, and demand and income elasticities must be worked out at a cultural level.
- (b) The attributes of the socio-cultural group or socio-economic group must be taken into consideration, and the economic status of the individual in question within that group must also be considered. This will make a big difference in modelling patterns. For example, if the individual is indigent, the additional purchases he makes with the additional income earned would be different from that of a relatively well-to-do man administered the same increase in income.
- (c) Thus, the status of the individual before the treatment or the intervention must be compared with his status after the treatment or the intervention.
- (d) A backward approach is recommended, and customers or end users must be the starting point i.e. Anthropological or cultural triggers.
- (e) This approach must be linked to labour matrices, with labour composition (i.e. skilling level per unit of output) taken as the basis, and upstream and downstream labour generation also shown. However, care must be taken to avoid double counting.
- (f) Even though supply may sometimes create its own demand, there must be culture-readiness for the goods. For example, expensive textiles may not have takers among primitive tribal groups. Thus, even if it is observed that supply has created its own demand, it can be assumed that culture was ready for it. This would explain why there

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<sup>46</sup> Leontief, Wassily W. "Input-Output Economics." *Scientific American*, October 1951, pp.15-21.

are wide differences in demand for goods such as cars across cultures even with the same per capita income, with demand converging only slowly.

- (g) This approach can be used to compare different scenarios as well, and can be carried out in conjunction with a spatial or a geographical analysis and a time analysis.
- (h) Culture can change owing to many factors, and technology and exposure being some of them. Refer to our symbiotic approach to socio-cultural change. <sup>47</sup>
- (i) Cultural change can be self-directed, externally directed, or non-directed, but these three scenarios would lead to differing rates of change. Cultural change is often brought about through triggers. Many concepts in Anthropology such as those of Action Anthropology, would help decide the appropriate nature of external intervention.
- (j) Thus, this approach assumes, and probably rightly so, that cultural bottlenecks are almost always the most severe constraining factor, and that no kind of development can begin without cultural change.
- (k) This model also takes into consideration the law of numbers, what we would like to call  $m \times n$ . In this case,  $n$  refers to the number of individuals, and  $m$  is the incremental income per individual. Thus, whenever  $m \times n = I$  (Constant), a higher value of  $n$  leads to an initial higher benefit for the economy. This can be proved through a temporal analysis of trickle-up and trickle-down patterns.
- (l) The Sociological Ninety ten rules must be borne in mind here, and only the typical cases assessed.
- (m) This model may have its own flaws, but we believe it is a perfect trade-off between simplicity and power. After all, every approach needs to have a starting point.
- (n) This model is based on demand-side economics, and the idea that demand will automatically create its own supply.
- (o) Terminal demand for products produced by different sectors can also be predicted for different population scenarios, and economic scenarios. However, suitable allowance must be made for technological change and progress.
- (p) The terminal demand can then be used to derive demand for various skillsets, and provide crucial inputs for education system design. This would complete an important loop.
- (q) This makes only a minimal set of assumptions, such as the presence of typical rational actors.
- (r) This model, we believe is also highly suitable to the needs of the post-globalized twenty-first century where technology, transfer of knowhow and investments are not major constraints or bottlenecks.



- (s) This model is also suitable to what we call the post-scarcity era of economics driven by renewable energy sources wind, solar, and recycling of resources. Thus, the number of non-renewable energy sources is expected to shrink, though they cannot be eliminated completely.

Our analysis also takes into consideration factors like supply and demand curve, income elasticity, demand elasticity, consumer habits and buying preferences, the nature of goods i.e. culture goods and non-culture goods. It may even analyse how demand for different goods increase or decrease as the economic scenario changes due to anthropological or cultural triggers, and the impact of such triggers on overall economic activity both regional and national. This approach may also be extended to include spatial and temporal analyses of such triggers.

### **Sectorial Inter-relationships in Economics**

#### **Case Study A**

Let us now take the example of Investment in Agriculture in a developing economy, and analyse the following scenarios.

##### **Scenario A**

Money is invested into an irrigation project in 100000 acres which is expected to produce an additional 1 million Metric tonnes of paddy annually. Let us assume that cultivation of paddy consumes X litres of water, Y kg of fertilizer and Z units of labour. Let us assume that paddy generates Rs A of income which is evenly distributed among the farmers each of whom own the same area of land. Thus, each farmer receives Rs B in a year. Each farmer employs n workers who are paid Rs C in a year.

##### **Scenario B**

Another irrigation project is expected to produce an additional 1 million metric tonnes of sugarcane. Let us assume that cultivation of sugarcane also consumes X litres of water, Y kg of fertilizer and Z units of the same grade of labour. Let us assume that sugarcane also generates Rs A of income which is evenly distributed among the farmers who own the same area of land. Thus, each farmer receives Rs B in a year. Each farmer employs n workers who are paid Rs C in a year.

##### **Scenario C**

Another irrigation project is expected to produce an additional 1 million metric tonnes of vanilla. Let us assume that cultivation of vanilla consumes X litres of water, Y kg of fertilizer and

Z units of the same grade of labour. Let us assume that vanilla generates Rs A1 of income which is evenly distributed among the farmers who own the same area of land. Thus, each farmer receives Rs B1 in a year. Each farmer employs n workers who are paid Rs C in a year.

#### Takeaway A

In all these cases, workers are at the bottom end of the pyramid, and may not splurge on luxury goods, but may spend most part of their income on essential goods, and some on other non-essential goods. This would increase demand for these goods. Thus, it is essential to distinguish between essential and non-essential goods. For example, Henry Ford increased daily wages from \$2 to \$5 in 1914, and this increased the demand for cars among his own workforce. The same principle can work here and demand for paddy among workers will increase upto a certain point, and taper off. Since the income of most farmers and labour hands would not increase greatly, this additional income will barely increase the demand for luxury goods, at least not directly. However, farmers could be expected to be more affluent than labour hands, and would spend the additional money differently. If a large number of irrigation projects are started in parallel, the additional paddy produced will find a ready market given that different farmers produce different goods, and the surplus can even be exported, if it is of adequate quality, or properly branded. Given that agriculture is at the heart of Indian culture and economic activity, there is very little involvement required from the government, excepting to make sure that Indian agriculture is profitable and resilient, and that the latest technologies are widely disseminated. Labour hands also have skills that can be marketed. The Indian government however, has a big role to play here, and such initiatives will increase output and reduce poverty greatly. In case, there is surplus production of paddy, there is some scope for using it on value added goods like rice-based snacks. Hulls can be used for other kinds of products, with suitable incentives and taxation structures. The government may also buy the surplus through Public Distribution Channels.

#### Takeaway B

Let us assume that Vanilla yields more income than sugarcane or paddy. Let us also assume that this results in more income for each farmer. Thus, this increases income of farmers by a greater degree, and this affects the demand for goods in a different way as workers may be willing to spend on non-essentials. Thus, different types of goods are likely to be produced to satisfy the demand. However, Vanilla itself is a non-essential with very small demand, and may require elaborate marketing strategies. It may also be subject to market risks, making it volatile. It is used in bakery products in small quantities, but the hospitality industry may be relatively robust. However, given the risks involved, few farmers would invest in Vanilla production given that the demand for Vanilla is limited. Therefore, an increase in quantity produced may also cause a rapid fall in prices. Also, workers who do not earn more than other agricultural workers,

need to consume paddy produced by other farmers, and paddy also needs to be produced in the economy. Thus, it would pay not to neglect culture goods at any cost, which have an assured demand. However, farmers often fail to get the bigger picture, and individual decision making is made in silos. This is a reality in most regions. However, in 2020, in the Indian state of Telangana, the state government decided to co-ordinate agricultural activity, and even instruct its farmers what crop to grow, and in what quantities.

Can we do a similar analysis for pepper and cardamom?

#### Takeaway C

Let us now assume that half the workers are indigent and the remaining belong to the lower middle class either because they own minimum assets, have other sources of income, or are recipients of minimum government social security. This fact would alter the demand for goods in a different way as the latter would be more willing to spend money on non-essentials. Thus, this would affect the demand for goods differently, and a different set of goods are likely to be produced to satisfy the changed demand.

#### Takeaway D

Let us now assume that workers invest money differently. Out of the lower middle class workers, Category A invests heavily in land and property. Category B invests only in consumption goods and in motor vehicles. Assuming that the two categories still spend the same money on essentials, are both equally well-off currently, how would these different investment decisions affect their future wealth and income patterns?

#### Takeaway E

Let us assume that paddy, sugarcane and vanilla consume different quantities of fertilizer. These would in turn cause different variations in downstream demand as fertilizer workers would also create spending for different essential and non-essential goods in a different manner. However, the number of workers employed by the fertilizer industry must also be taken into consideration here, and it is likely to be relatively small.

#### Takeaway F

Let us assume that some of the workers invest the additional money received in their children's education. This leads to the production of skilled workforce which may bring further benefits to the economy. If there is no immediate demand for skilled labour in the economy, he may emigrate to a foreign country, and remit money.

#### Takeaway G

Thus, there are wide variations on a case to case basis, and one cannot endorse either supply-side economics or demand-side economics completely. However, from our perspective, mass empowerment and trickle up can boost the economy greatly, and create long-term macro-economic stability. Thus, all these factors need to be taken into consideration by planners even if the economy in question is a free market one, and the impact of different scenarios assessed.

#### Case Study B

Let us now assume a fertilizer factory is built, and the production of agricultural goods is static. The additional quantity fertilizer produced cannot be taken up by the agriculture sector at this stage, because supply of fertilizer cannot create its own demand, and agriculture is the primary sector here. The only exception here could be if the new fertilizer company here offers better goods, or the same goods at a lower price through innovation or cost-cutting measures. This may however, seldom happen in reality. Similarly, demand for cement will pick up only if the construction sector picks up, and the construction sector is a barometer of the economic health of a nation. Its health would of course depend on the well-being of the agricultural sector and other primary sectors. Thus, we present a strong case for bottom-up development approaches, and trickle up strategies, particularly for countries with inequality. Development strategies must also vary widely from region to region.

#### Case Study C

Let us now assume that a software company offers a new kind of product which promises productivity gains. It is therefore in a position to market its software to well-established companies who also benefit by it. This leads to greater productivity, and companies use the gains on additional investments, however small they may be. This analogy holds good for most innovations and inventions. Thus, there is no hard and fast rule here, and supply and demand analysis must be carried out on a case to case basis. Even here, robust demand will become possible only if there is a strong and well-diversified economy.

#### Case Study D

A college comes up on 100 acres of barren land in a remote region near a village. It mostly employs professors and lecturers who are non-residents to that region. A few non-teaching staff are also employed. The college has 1000 students. How would this project impact the fortunes of the people of the village? What if the college was built on fertile land, and the land was acquired from the villagers at market cost? What if the land was acquired at government rates? Assuming the students are locals, how would it impact the economic development in the region? How would different policy scenarios impact the local economy, and how?

#### Case Study E

Suppose Mukesh Ambani splurges his money on luxury cars. What type of trickle down patterns would that have? What if he were to educate 10000 poor children each year with the same money? What if the same money were used to provide scholarships to deserving university graduates? What if he were to invest the money in rural development project? How can government policy modulate investment? Can upstream and downstream analyses be carried out for all these scenarios? What if the luxury cars were produced domestically? How many workers would they employ? What if the cars were imported? How many domestic workers would then stand to benefit? How can the government modulate developmental patterns through taxation regimes and investment policy? Will these necessarily have negative secondary consequences? How to different policies perpetuate inequalities? Or how do they lead to equitable development? What impact can different growth models have on different sectors of the economy? What can we learn from past mistakes? What are the dangers of throwing the baby out with the bathwater?

#### Case Study F

Landless labourers in a state in India are given half an acre of land each. They are also provided a small dwelling free of charge. This gives them additional financial security. Assuming that these people act rationally, and in their own interests, how would this impact their upward mobility? Would the situation be different if they were given a basic income of Rs 3000 per month per family?

#### **Economic transaction and socio-cultural group mapping or socio-economic group mapping**

In this type of analysis, Economic transaction and socio-cultural group mapping or socio-economic group mapping is carried out. This kind of an analysis is typically carried out for a particular timeframe, in a chosen location, and with actors who are hand-picked through a pre-determined sampling strategy. The use case method is used.

The following types of transactions are typically analysed in this kind of a study, and care must be taken to categorize all transactions into these heads. From a perspective a culture based analysis and a culture or a context-driven rationale must also be carried out.

1. Regular transactions
2. Non-regular transactions
3. Typical transactions
4. Non-typical transactions
5. Deep transactions (Involving deep cogitation and introspection)
6. Superficial transactions (No deep cogitation or introspection)
7. Regular consumption expenditure
8. Non-regular consumption expenditure

9. Short-term Investment patterns
10. Medium-term investment patterns
11. Long-term investment patterns
12. Short-term liquidity borrowing
13. Loans and other borrowings
14. Social borrowing
15. Purchase of productive assets
16. Purchase of other assets
17. Savings and thrift (Social choice theory)
18. Investment in education and merit goods
19. Investment in harmful goods
20. Retirement planning and savings
21. Inheritance patterns (Inward)
22. Inheritance patterns (Outward)

This kind of analysis must also be supplemented by an analysis of the following factors within the context of a culture:

1. Stability of income
2. Diversity of income sources
3. Flexibility to acquire new sources of income
4. Number of earning members
5. Types of Breadwinners (Male, Female, Child labour etc.)
6. Job stability versus stability of secondary sources of income
7. Dependency on job-based income versus dependency on savings or dependency on assets
8. Dependency on state support
9. Number and characteristics of dependants
10. Average indebtedness
11. Indebtedness trends
12. Family Support system
13. Extended family support system
14. Social support system
15. Legal protection mechanisms and relevant government regulation

Types of interactions would include the following. Thus, any kind of interaction between the actor, and any other human or non-human entity should be captured as it will be useful for downstream or secondary analyses:

1. Interface with non-human assets

2. Interface with cash (both income and expenditure, and this must be accompanied by a detailed income and expenditure analysis)
3. Machine interaction to assess productivity
4. Interaction with the environment and natural assets
5. Interface with cultural institutions such as temples
6. Interface with social institutions such as charitable organizations
7. Interaction with employers
8. Interaction with employees
9. Interface with other human actors
10. Interaction with other private institutions
11. Interaction with financial institutions
12. Interaction with banks
13. Interface with natural elements such as water from streams
14. Interaction with public goods
15. Interaction with social goods
16. Interaction with social welfare mechanisms
17. Emergency interactions

Let us now analyse the following scenarios, and this would also additionally drive home the point that culture specific analyses are common:

A man gets up at 5 o'clock in the morning. Throughout the day, he interacts with resources. He uses water early in the morning, and goes to the shop to buy items for breakfast. These may form a set pattern, and patterns can be aggregated if many individuals are studied. If Item A is not available, item B is purchased, and this represents an alternative. This approach can be made to work through intent observation or self-declaration. He also interacts with assets throughout the day, and these may be his owned assets, assets on loan, or third-party assets. This study may be repeated for socio-cultural classes, socio-economic classes, and this exercise may even be used to define socio-cultural classes and socio-economic classes. While carrying out this exercise, points of difference between various socio-cultural classes and socio-economic classes must be carefully observed and noted.

A man in Andhra Pradesh, India owned 27 houses. These were low-end costing no more than \$ 10000 each. He had no liabilities, He led a happy life but could not afford high-end cars. Contrast this with the American way of life where most people have mortgages. How do these two sets of people live? How do they plan their finances? What are their attitudes towards money? What are their attitudes towards life? How happy are they? In what way does each of these approaches affect the macro-economy when aggregated?

Among thirteen countries surveyed in a study, the average person living on under \$1 per day did not seem to spend all his money on food. Food typically represented between fifty-six to seventy-eight percent of expenditure among rural households, and between fifty-six to seventy-four percent in urban areas. For the rural poor in Mexico, slightly less than half the budget was spent to purchase food. Yet among the non-food items that the poor spent money on, expenditures on alcohol and tobacco were high. The amount spent on alcohol and tobacco varied widely from country to country, and was very high in Mexico. Spending on festivals also was an important part of life for many poor households. In Udaipur, more than ninety-nine percent of poor households spent money on a wedding, a funeral, or a religious festival in the year surveyed. How do cultural factors impact the macroeconomy?

A survey found that the list of assets owned by individuals varied across countries. The assets surveyed included radios, televisions and bicycles, and variations in ownership were wide. These were shaped by cultural and social factors and a desire to keep up with the Joneses. Ownership of radio and television, however, increased steeply with increase in income: In all the countries surveyed, the share of rural households owning a television was larger for those who live on less than \$2 a day than those living on less than \$1 a day. For example, the percentage of people owning a television rose from fourteen percent for those living on \$1 a day to forty-five percent for those living on less than \$2 a dollar a day in Cote d'Ivoire; from seven to seventeen percent in South Africa; and from ten to twenty-one percent in Peru. This pattern was observed in other contexts (Filmer and Pritchett, 2001), and some economists want to use the ownership of durable goods as a benchmark for poverty. How do cultural preferences affect the macroeconomy?

Ownership of Land, a productive asset, is widely cherished in most cultures. In another survey, it was found that most rural households owned some land though there were enormous country-to-country variations in ownership percentages and sizes of holdings. Only four percent of those living under \$1 a day owned land in Mexico, 1.4 percent in South Africa; thirty percent in Pakistan, thirty-seven percent in Guatemala, fifty percent in Nicaragua and Indonesia, sixty-three percent in Cote d'Ivoire; sixty-five percent in Peru; and eighty-five percent in Panama. However, In Udaipur, Rajasthan, India, ninety-nine percent of the households below \$1 a day owned some land as well as a small house. Clearly ownership of land was driven by both cultural and economic factors, and these have other downstream impacts such as asset creation and indebtedness.

In Udaipur, about two-thirds of the poor had an unpaid loan at the time of conducting the survey. Of these, twenty-three percent were taken from a relative, eighteen percent from a money lender, thirty-seven percent from a shopkeeper, and only 6.4 percent from the



organized sector including a commercial or a cooperative bank. The same patterns was found in the city of Hyderabad, where most households living below \$2 a day borrowed from moneylenders (fifty-two percent), some borrowed from friends or neighbours (twenty-four percent), and others from family members (thirteen percent), and only five percent of the loans were with commercial banks. Thus, cultural factors, and habits were at work here.

A reverse mortgage is a mortgage loan, secured by a residential property, that enables the borrower to access the unencumbered value of the property. The loans are promoted to older homeowners and typically do not require monthly mortgage payments. Reverse mortgages allow elders to access the home equity they have built up in their homes now, and defer payment of the loan until they die, sell, or move out of the home. The idea of reverse mortgage has not caught on in other more traditional societies, where family bonds and social ties are high. How do inheritance patterns impact wealth creation?

### **Human Proximity theory**

Human proximity theory can then be used to identify assets and goods that are central to human existence or economic activity in a particular culture, and assets and goods which are less central to it. This approach can have a wide variety of potential uses, including economic planning and taxation policy, and ethnographic data can eventually be collected from cultures all over the world. The identification of proximal and distal goods will be done through use case modelling.

### **Economic transaction and socio-cultural group mapping or socio-economic group mapping: Lifecycle approach**

In the lifecycle approach, the entire gamut of lifecycle interactions will be captured from birth till death. This would include factors such educational patterns, Inheritance of ancestral assets, Mean time of inheritance, Quantum of inheritance, Parent's earnings, Stability of earnings, Subsidies received, Government support mechanism, typical loans received, loan payout patterns, Income patterns, expenditure patterns, vision for life, self-upliftment patterns, health issues such as tobacco, alcohol consumption patterns, investment patterns, saving patterns, retirement planning, bequeathment of assets etc. The Sociological Ninety-ten rules will need to be followed here.

### **Interactions between socio-cultural groups and socio-economic groups**

In this type of analysis, economic and social interactions between different socio-cultural groups and socio-economic groups can be assessed, as this will provide a useful metric about the level of integration, closeness or distance between these groups. In most cases, social interactions would form the basis of economic interactions, and the co-relation between the

two needs to be assessed. This analysis can be carried out for different occupational groups as well, and would be a useful input to other kinds of analyses such as trickle down analyses.

### **Interactions between socio-cultural groups, socio-economic groups, and the macro-economy**

In this type of analysis, economic and social interactions between different socio-cultural groups and socio-economic groups and the macro-economy can be assessed, as this will provide a useful metric about the level of integration, of these groups with mainstream economic activity. In most cases, social interactions would form the basis of economic interactions, and the co-relation between the two also needs to be assessed. This analysis can be carried out for different occupational groups as well. This can be used to model decentralized development models as well, and to avoid the perils and pitfalls of over-centralized planning seen in India in the early decades of its independence. As usual, the cultural and economic preferences of various groups need to be taken into consideration, and what works for Tamilnadu may not work in Kashmir. Thus, cultural preferences and attributes (linked to identity theory, among others) must form one of the bases of centralization or decentralization decisions.

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### **Trickle Down Analysis**

Trickle down economics or trickle down theory refers to the idea that lowered taxes on the rich, and a laissez-faire approach automatically leads to a trickle-down of wealth in society, and reduces poverty. It is also closely related to supply-side economics. This term was first used by American commentator Bill Rogers, and became widespread towards the end of the twentieth century. There have been many variants of trickle-down economics such as Reaganomics (A term attributed to Paul Harvey Aurandt). It is sometimes known derisively as Voodoo Economics, and pro-trickle down economists such as David Stockman later turned into its bitter critics. Trickle down economics has had several critics, who accuse its proponents of pandering to the wealthy by creating tax breaks exclusively for the rich. John Kenneth Galbraith refers to this as the horse and sparrow theory: "If you feed the horse enough oats, some will pass through the road for the sparrows." Trickle-down proponents made several assumptions which may or may not hold good; in the real-world, common barriers to trickle down and circulation of wealth may include social and cultural barriers, geographical barriers, and infrastructural bottlenecks, among several others.

On the other hand, the trickle-up effect states that policies that benefit the middle class directly boost the productivity of society as a whole, and those benefits also trickle up to the wealthy. It is based on the fundamental premise that "A rising tide lifts all boats." The difference between trickle down and trickle up can be illustrated in a speech made in 1896 by William Jennings Bryan, "There are two ideas of government. There are those who believe that if you just

legislate to make the well-to-do prosperous, the prosperity will leak through on those below. The Democratic idea has been that if you legislate to make the masses prosperous, then the prosperity will find its way up to every class that rests on it.” Another via media approach is the “build out from the middle theory”. Pamper the middle classes, and the entire society stands to benefit, or the idea that other factors notwithstanding rapid economic growth is a necessary adjunct to the trickle down of wealth. (Dollar and Kraay 2002), (Bhunumurthy and Mitra 2004), and (Owyong 2010) <sup>48</sup>

The following types of economic activities lead to different types of trickle down patterns:

- Large capital with small primary employment (Capital intensive industries)
- Small capital with small primary employment
- Large capital with large primary employment e.g. textiles, solar manufacturing (Capital and labour intensive industries)
- Small primary employment with large secondary employment e.g. upstream industries, downstream industries, backward integration, forward integration
- Small primary employment with high multiplier effect or other economic benefits e.g. cell phones, telecommunications, transportation
- Small primary employment with other social benefits or positive externalities e.g. electric cars
- Merit goods like education
- Industries with negative externalities

The idea that trickle down of wealth happens naturally and flawlessly is fundamentally flawed from our perspective because such processes are severely compromised by real-world constraints such as the following:

- Socio-cultural barriers between groups
- Socio-economic barriers between groups
- Absence of Inter-cultural integration between groups
- Absence of Intra-cultural integration within a group
- Geographical barriers and non-interconnectedness
- Infrastructure bottlenecks
- Traditional spending and social interaction patterns
- Preferences in trading and business partners
- Capital intensive nature of some industries slows down the trickle down process

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<sup>48</sup> A Theory of Trickle-Down Growth and Development, PHILIPPE AGHION, *University College London and European Bank for Reconstruction and Development* and PATRICK BOLTON ECARE, *Universitt Libre de Bruxelles and CENTER, Tilburg University*, *Review of Economic Studies* (1997) 64, 15 1-1 72

Thus, in any kind of trickle down analysis, it is necessary to identify 'Primary beneficiaries'. These are individuals who directly stand to gain from a wealth creation or an investment pattern. For example, if an irrigation project is launched in Area A, farmers in that area are primary beneficiaries, while the non-farming community in Area A, and farming communities in surrounding regions who trade with Area A could be secondary beneficiaries. Tertiary beneficiaries could be those who benefit indirectly from such increased economic activity, such as other citizens of the nation. In addition, primary losers are associated with some kinds of economic activity; for example, farmers may give up land for an irrigation project, and may not be compensated adequately could be primary losers. Secondary losers could include other people whose livelihoods are impacted by such a project.

In such an analysis, the number of primary, secondary or tertiary beneficiaries and the primary or secondary losers must be computed, along with the incremental and the relative gain or loss. In addition, the economic status of the beneficiaries or losers must be taken into consideration, to arrive at meaningful conclusions so that these may be used as inputs into other kinds of analyses detailed in the paper. Trickle down analysis must be accompanied by an analysis of breadth (number of beneficiaries), depth (number of classes benefitted below), and magnitude (the quantum by which different beneficiaries are benefitted). Likewise, trickle up may be self-directed (self-upliftment), or externally induced, and the mean and the patterns of lift along with the number of beneficiaries must be computed. This kind of an analysis must also be complemented by a temporal and a spatial analysis wherever warranted. For example, the time factor in trickle down or trickle up analyses may be useful in some kind of decision making, as well as a spatial analysis; for example, the money earned by a Software Engineer in Bangalore may never reach a tribe in the Andamans, given the complete geographical and cultural isolation between the two. All these factors would naturally help us construct what we could call a 'Hypothetical wealth transfer model', and would form a part of the proposed science of 'Manumittonomics'.

### **Trickle up analysis**

A trickle up approach to wealth creation is one associated with mass creation of wealth often through the empowerment of a large number of people at the lower economic end of the spectrum of lower middle income groups. In real life, the differences between trickle up and trickle down may be hard to establish. As a crude rule of thumb, trickle down begins from the apex and trickles down to other echelons of society. However, trickle down may also precipitate a trickle up again, and a trickle up may be followed by a trickle down. Both these may be referred to as wealth creation loops, but the efficacy of each of these in different contexts needs to be assessed through fieldwork. For example, a man starts a garment factory. Another co-operative starts a dairy. A third individual may start a software company. Another

conglomerate operates a steel mill. All these induce trickle down and trickle up effects, and in some cases, trickle down and trickle up processes may begin simultaneously. These may also lead to horizontal flows of wealth in a society, through what is known as the spillover effect. The spillover effect is commonly associated with a multiplier effect, just like trickle-up of wealth, and the attendant benefits to society can be huge.

Thus, a trickle up approach to the creation of wealth can be identified by the following characteristics:

Characteristic A: Mass creation of wealth due to better education or empowerment of the masses, or mass empowerment and wealth-creation strategies

Characteristic B: Creation of an entrepreneurial or a creative class

Characteristic C: Wealth trickles down again to the rest of the population

Characteristic D: This leads to a wealth creation loop or a trickle-up, trickle-down (This may not be characteristic of all trickle down patterns, as in the case of the latter, the masses may not be suitably empowered to take advantage of opportunities).

Here are some examples of major revolutions demonstrating the trickle up of wealth:

- Green revolution in India: The Green revolution was a revolution that took place in the 1960's in India after back-to-back droughts devastated the Indian economy and led to food imports on a large scale through the PL480 programme. M S Swaminathan and Norman Borlaug are often credited with this revolution. This revolution was however controversial because it relied heavily on fertilizers and pesticides, and bypassed many parts of India. After several decades, India is embracing organic farming, and water conservation techniques in a big way.
- White revolution in India: The White Revolution was a revolution in the western Indian state of Gujarat that led to production of copious amounts of milk through the Operation Flood. In this revolution, women participated in a big way. Amul, a dairy co-operative which was founded by Verghese Kurien, played a major role in this. By the 2000's, India became the world's largest producer of milk, surpassing even the USA, and rural incomes had increased greatly.
- Microfinance revolution: The Microfinance Revolution was pioneered by Muhammed Yunus of the Grameen Bank in Bangladesh, and specialized in lending small sums of money to poor families to help them become entrepreneurs. Dr. Yunus eventually won the Nobel Prize for his work. Microfinance has since taken off in India, and parts of Africa to varying degrees of success.
- Andhra Pradesh was once considered to be a backward state in India. However, a major education revolution took place there since the 1990's based on rich farmers' wealth. This also contributed to the IT revolution in Hyderabad. Many children have exhibited little

desire to continue in the farming sector, and have left for greener pastures overseas. Some second generation Non-Resident Telugus have however, demonstrated a desire to return to the motherland, and help the farming community stand on its feet.

- Large scale dam construction in India: India also promoted large scale dam construction in the 1950's. These were known as multi-purpose dams, and were the brainchild of Prime Minister Jawaharlal Nehru. However, some of these led to destruction of forests and the loss of livelihoods.

Projects that claimed to promote a spillover of wealth, but were dubious or questionable

- Amaravathi township project in Andhra Pradesh: The Amaravathi project was an aborted greenfield city project in the state of Andhra Pradesh, and was the brainchild of former Chief Minister Chandrababu Naidu. This was however, proposed on fertile agricultural lands, and many farmers lost their lands. They were not in a position to take them back as construction has already started by the time the project was virtually scrapped. Among the projects proposed were 'riverfront tourism' which has very little relevance in the Indian context. Investments worth billions of dollars were targeted, but such figures were highly suspect.

Trickle down analysis, trickle up analysis, and spillover analysis are the pillars of Anthropological economics. This approach can also be extended to cover a percolation of ideas with potential economic implications, and not just wealth alone, and the roles of invisibles in driving change must be emphasized. The wealth creation loop can be amplified in many ways. For example, by creating Investment opportunities, through entrepreneurial development, by instituting suitable tax regime (Tax rates/tax breaks/tax holidays etc.), or through direct investment E.g. agricultural infrastructure, and counter-balancing these with macro-economic and global realities.

Countries which may rely only on the trickle down model are those which demonstrate a high degree of equality, have a large middle class, and few people below the poverty line. Countries which may rely on both trickle up and trickle down approaches but focus on trickle up approaches and the spillover effect are those which have a high degree of inequality, and many people below the poverty line. Countries which may rely on both trickle up and trickle down approaches but focus on trickle down approaches are intermediary countries like China.

### **Cultural Change Analysis**

Cultural change analysis would be one of the important duties of an Anthropological Economist because it would help predict the need for changes to economic models. Changes can be endogenous or exogenous, and can arise due to various factors. We have discussed the modes of propagation of cultural change elsewhere in this paper. Cultural changes can be captured

through prolonged fieldwork, or what we call ‘Perpetual Ethnography’. Cultural change can also be predicted through a wide variety of lead indicators, such as increasing educational attainment or falling birth rates. Other lead indicators could include increasing cultural awareness, bargaining power, information symmetry, rising motivational levels, etc. Such changes to indicators can then be compared with data taken from other contexts, to predict near-term and future cultural changes with reliable precision. Cultural change would in turn impact institutions, and values, making it essentially a bi-directional process.

We also introduce the term “Econoculture” here and this would be defined as the economic aspects of culture. Cultural change would therefore determine shifts in patterns of employment, shifts in patterns of economic activity etc. Another closely related concept is that of Cultural alienation where a culture drifts further and further away from its roots in due course. This could be driven both by cultural factors, technology-driven change, changes in educational patterns, changes in employment patterns, and economic imperatives, and could also lead to the creation of alienated class within an economy. The economic fallout of cultural alienation could be that a culture is no longer willing to produce or consume traditional or inferior goods. People may also no longer be interested in engaging in traditional activities. For example, Americans may not take to farming on a large scale and most Americans won’t do low-end jobs. However, in India, farming is still important. Therefore, foundations of an economy must always be based on sectors related to cultural base of the economy, and changes to planning made as the basis of culture changes. Other aspects that need to be considered as the rate and direction of change, and cultural limits which would determine the terminal end state.<sup>49</sup>

The wide variations in the importance of different sectors in different economies will be illustrated from this example which also shows that change and convergence is a slow process. In 1950-51, Agriculture and allied sectors contributed fifty-nine percent of the total national income in India. This share declined because Industry and other sectors picked up. The figure declined to eighteen percent in 2008, but is much higher than other countries. For example, the figure in the UK and the USA is only three percent. In India, the Agriculture sector employs fifty-seven percent of the population as opposed two to three percent in the UK and USA, and six percent for France.

### **Anthropological impact assessment**

An Anthropological Impact assessment may be carried out on a specific initiative or project, and may also additionally be carried out for a specific time-frame. An Anthropological impact analysis is a subset of social impact analysis, or a socio-economic analysis.

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<sup>49</sup> Malinowski, B. (1944). *A Scientific Theory of Culture and Others Essays*. Chapel Hill, N. Carolina: The University of North Carolina Press

To begin with, the positive impact of a project is also taken into consideration. In case of a large multi-purpose dam, the wealth created by the additional area brought under irrigation coverage, the downstream benefits of the electricity generated, are taken into consideration, and are assigned as 'Positive externalities' from the project, which would also include an anthropological and a human component. The secondary impact and the multiplier effect of the project must also be taken into consideration and quantified, and for this, the principles of the 'Hypothetical Wealth transfer model' specified in this paper, may also be used. The list of assumptions used, and the different types of potential risks involved, also need to be laid bare. This approach needs to be integrated with all methods used in social sciences such as fieldwork, and other quantitative and qualitative techniques. The views of the parties also need to be taken into account, and no assessment is complete without such an exercise. This approach can also be used to assess proposed policy changes such as contract farming, corporate farming and direct sale of produce by farmers to third parties. Other factors such as environmental considerations also need to be taken into consideration given that they compound human misery, but the Anthropological element of issues may be highlighted separately.

The environmental movement has grown strong since the 1980's, at various local and national levels, and at the international level. According to Brosius (1999), environmentalism is even beginning to shape relationships between nations, individuals and institutions. Many anthropologists such as Douglas and Wildavsky (1982) have also published considerably on environmentalism. The publication of 'The limit of Growth: A report for the Club of Rome's project in the predicament of mankind' (Donella H Meadows et al., 1972) , and other reports such as 'the world commission on environment and development' (1987) and 'The State of India's environment: A citizen's report' (1982). Other institutions and organizations such as 'Defence of the planet', and the 'save the earth movement', the 'Earth's friends society reflect the growing concern for the environment. Environmental movements have sprung up in different parts of the world, including India, and opposition has cemented against major environmentally destructive projects. These have also often proved to be detrimental to the livelihoods of millions of people. Let us now review some such projects in the Indian context:

The Silent Valley is located in Kerala and comprises 9000 hectares. It is rich in many forms of flora and fauna. The idea of a dam on the River Kunthipuja was first conceived by the British in 1929, and was finally sanctioned by the Indian government in 1973 after a lengthy feasibility study. The objective of the project was to generate 240 MW of power, and irrigate 10000 hectares of land, besides creating jobs. The people of the area initially favoured the project, but some sections realized that it would damage the environment and impact their earnings adversely.



The Chipko Movement began in 1973 in Gharwal in Uttar Pradesh. The organizers based their movement on the ideology of Mahatma Gandhi and Vinobha Bhave. The protests were triggered by a fall in market prices for forest produce, and landslides and other catastrophes. Some of these events were linked to over-mining and exploitation, and leases were often granted to commercial establishments to cut trees. The Chipko movement led to the hugging of trees in order to prevent them from being axed. It was felt that deforestation would threaten their sources of livelihood, and this was a situation where both the ecology and the economy were at stake. The Chipko movement successfully mobilized people to protect their own interests and their own livelihoods.

The Sardar Sarovar project proposed a dam on the River Narmada in Gujarat. The construction of dams and reservoirs were expected to displace one million people, and submerge 350000 hectares of forest land and 200000 hectares of agricultural land, leading to a loss of tens of thousands of livelihoods. Over 120000 people were expected to be displaced, and 250 villages relocated. Most of the displaced people were expected to be small and marginal farmers, and labourers, many of whom were illiterate. This led to an anti-project among the people, and world bank funding was withdrawn.

Gandhamardhan, one of the bauxite rich hill ranges, is located in Sambalpur and Bolangir districts in Western Orissa, and is widely revered by tribals as a God because it provides them with fodder, firewood and water. BALCO had a plan for mining these hills to provide employment for some 3500 persons. BALCO had also promised a railway line, hospitals and schools, besides social forestry. However, BALCO destroyed pristine forests, and destroyed the livelihoods of people. Fertile land was also submerged. Many locals therefore formed groups to protect their own interests, and raised awareness among the public. Kashipur is one of the tribal blocks in Rayagada district. The tribals of the region eke out a livelihood by growing ragi, paddy, millet, grams, maize and niger seed. The people of the region lived in perfect harmony with nature. The exploitation of the region was begun by JK Paper mill of Rayagada, Utkal Aluminium International and other companies. They began to exploit the natural resources of the region in the name of development. This led to land alienation and impoverishment. People successfully campaigned against projects that were opposed to their interests, and even met the Chief Minister in this regard. Niyamgiri is a range of hills in Orissa, and is inhabited by the Dongaria Kandhas who consider themselves to be the descendants of Niyam Raja. Vedanta Aluminum Limited proposed setting up an aluminum refinery plant in the region, and land acquisition would threaten the flora and fauna of the region, besides destroying livelihoods. The locals fought to protect their rights, and were determined to stop mining in the Niyamgarhi hills.

In all such cases, impact assessments would also need to incorporate a time element because short-term negative externalities may translate into long-term positive externalities, but there would be inherent limitations to such a process given the loss of cultural power, and the inability of stakeholders to adopt to rapid cultural changes, and as usual, the human and cultural element needs to be considered in any analysis.

### **Cultural Elasticities of Income and Demand**

Another role of an Anthropological Economist would be to work out Income elasticities and price elasticities of demand for various goods for different cultures, and carry out a study of changes in customer preferences in various points in time. This may also involve a preparation of Customer Indifferences curves for different cultures across space and time.

In order to do this, he needs to understand the following:

1. The symbiotic process of socio-cultural change
2. Other cultural change theories
3. Attributes and specifics of the cultures
4. Customer habits and preferences in that culture
5. Culture and non-culture goods in that culture as well as taboo goods
6. Changes to customer habits and preferences in that culture over time
7. Understanding differences in cultures
8. Understanding of political framework, legal framework, religious factors, social factors, cultural factors etc.
9. Differences in behavioural patterns and aberrations across cultures

### **Anthropological Accounting**

The objective of Anthropological Accounting would be to identify details of skills, mind-orientations, linguistic skills, technical skills, other skills, cultural barriers to skilling and upward mobility, an assessment of the cultural landscape, a Cultural SWOT analysis, etc., and all other aspects that need to be borne in mind while carrying out a human resource and a cultural evaluation on a macro-scale. Value of Human resources and cultural capital must be assessed, as determined by cognitive and behavioural aspects of humans in a cultural context. This approach would also be linked to national objectives, and would be related to disciplines such as Human Resource Accounting, and National Accounting. Value assignment in HRA remains, tricky, complex and elusive, and there is no agreement on such issues as yet. Human Resource Accounting is not mandated in most countries either. We will also wait for Human Resource accounting theory to evolve so that the concepts can be extended to Anthropological Accounting as well. Human Resource Accounting evolved in a corporate context, but must be extended for our purposes. Social accounting is a practical means of describing what is taking

place in an economic system to express it in terms of transactions between a set of accounts drawn up on the double-entry principle, and in a matrix format, and evolved in the context of social responsibility of organizations. National Accounting, on the other hand, is a register of economic activity in a nation. A proposed template is given below, and this is akin to a scorecard approach. Our approach is therefore, primarily driven by identification of Anthropological assets and Anthropological capital which would comprise social and cultural capital as well.<sup>50 51</sup>

Date: Analysis carried out by: Sampling strategy: Remarks:
Short-term analysis
Current linguistic skills Current linguistic landscape Linguistic barriers
Other Skills (Skill 1,2,3 etc)
Current skills Current demand Barriers to skilling Talent-skill mapping
Medium-term analysis
<<Same as above>>
Long-term analysis
<<Same as above>>
Details of Local environment
Strengths Weaknesses Opportunities Threats Limitations
Details of Macro environment
Strengths Weaknesses Opportunities Threats Limitations
Details of Global environment
Strengths Weaknesses Opportunities

<sup>50</sup> FUNCTIONS AND CRITERIA OF A SYSTEM OF SOCIAL ACCOUNTING by Richard Stone *Director of the Department of Applied Economics, Cambridge*

<sup>51</sup> Social Accounting Systems: Essays on the state of the art, Edited by F. Thomas Juster, Academic Press, 1981

Threats

Limitations

Cultural preferences

Culture non-preferences

Types of life visions and orientations for life

Cultural limits

Anthropological limits

Current Anthropological Equilibrium position

Strengths and Weaknesses assessed

Strengths

Social factors

Cultural factors

Linguistic factors

Technology

Infrastructure etc

Education system

Health

Talent recognition

Entrepreneurship

Aspiration cherishment

Institutions

Environmental factors

Other enablers

Weaknesses

Social factors

Cultural factors

Linguistic factors

Technology

Infrastructure etc

Health

Education system

Talent recognition

Entrepreneurship

Aspiration deficit

Environmental limitations

Institutions

Other disenablers

Details of Cultural Capital

Details of Social Capital

Details of Intellectual Capital

Sectorial Assessment

Details of Unfulfilled potential

Positive list of Economic Activities

High priority list of Economic Activities

Negative list of Economic Activities

Micro and macro economic mapping

Recommendations

1.

2.

3.

Specific Recommendations

By Gender, age bracket etc.
Action plan with proposed initiatives

Anthropological accounting would also require an assessment of an Anthropological rate of return, either realized or anticipated, and this would require an assessment of anticipated social and cultural dividends as well. Possible metrics could include, GDP growth rates, poverty rates, human happiness etc. Human foundational competencies, skills, individual mind-orientations, societal or cultural-orientations and cultural remediation patterns must be factored into such an analysis, and needless to say the benefits to society will be huge. This would stand in stark contrast to socialist approaches which may multiply inefficiencies. Socialist policies may demotivate and disincentivize; Anthropological Economics should not, and must boost growth with equity, along with cultural considerations, long-term considerations and sustainability.

### **Economic and Anthropological double accounting**

The idea of an Economic and an Anthropological double accounting is derived from the fact that most traditional accounting systems fail to take into consideration Anthropological costs and returns, and use it to compute returns on investments. This concept is related to, and is a logical extension of the idea of monetization and Keynesian Economics, a concept which first developed during the great depression of the 1930's, and advocated greater government spending for growth. These measures were adopted by Franklin Roosevelt as a part of the Great Deal, a proposed path towards economic recovery, and contradicted Herbert Hoover's austerity measures which had sunk America greater into the Great depression. Even though such measures tended to increase fiscal deficit, and increase inflationary pressures in the economic, they were eventually contained through higher economic growth. Such ideas have been revived in recent times in the form of the Modern Monetary Theory (MMT), though such ideas remain highly controversial. Our approach states that government expenditure must be recovered in terms of both economic and anthropological benefits within a reasonable time frame for expenditure to translate into sustained growth.

From our perspective, Economic and Anthropological double accounting would consist of the following components:

- Details of proposed Human resource development plans and Human capital development plans
- Revenue expenditure incurred to promote human, social and cultural capital
- Capital expenditure to promote human, social and cultural capital
- Identifying targeted beneficiaries

- Identifying proposed Anthropological dividend
- Identifying non-productive schemes such as welfare schemes
- Anthropological dead loss for non-productive schemes
- Different schemes for different socio-cultural groups and socio-economic groups
- Identifying Economic benefits
- Identifying Anthropological benefits
- Computation of Economic Cost benefit analysis
- Computation of Anthropological Cost Benefit analysis
- Striking an Economic versus Anthropological balance, and accounting for the same (Economic versus Anthropological Ideal equilibrium)
- Identifying scenarios such as the Economic Anthropological win win scenario, Economic Anthropological win lose scenario, Economic Anthropological Lose win scenario, and the Economic Anthropological lose lose scenario
- Assessing impacts of various schemes such as the Universal Basic scheme (various thresholds and payout levels), free lunches at schools, old age security systems etc
- These assessments must be ratified through fieldwork-driven approaches, and must also be quantified wherever possible, and included in this kind of an analysis.

The exercise may also be referred to as an Anthropological and Economic cost-benefit analysis.

### **Growth Models in Anthropological Economics**

We will now present some possible growth models rooted in the concepts of Anthropological Economics. This does not purport to be a complete or an exhaustive list, and more allied models can be readily added keeping the principles of this paper in mind, or the proposed models extended in wholly new directions. These approaches must not be understood or assessed in silos, but in relation to each other, and real-world recommendations will involve the combination of several models. They must also be adopted in conjunction with other growth and developmental models falling outside the purview of Anthropological Economics.

### **Motivation-driven growth models**

We believe that Motivational economics is at the heart of Anthropological economics, and must be the necessary take-off point for any modelling centred on the interface between Anthropology and Economics. This is because human motivation, or the absence of it, when judged in a culture-specific context, would form a critical rationale and yardstick for growth or lack of growth. This warrants the elevation of Motivational Economics into a full-fledged branch of Anthropological Economics, with the participation of Economists, Anthropologists, Psychologists, and Behavioural Specialists from all over the world.

Motivation may be defined as an inner need or desire that drives human behaviour and directs it towards a goal. Many theories have been explained to explain motivation, and human drives, and we present a few of these below. However, it goes without saying that culture and motivation are tightly interlinked, and personal attributes of individuals play a role in determination as well. Mundane factors such as parental pressure, peer-pressure, oppression, and a desire to keep up with the Joneses would play a role as well. Abraham Maslow proposed that certain needs have priority over others. Physiological needs like breathing, thirst, and hunger come before psychological needs such as achievement, self-esteem, and the need for recognition. Some needs such as self-actualization needs are placed at the apex, while safety needs, belonging and love needs, and societal factors are placed at the middle. This theory is similar to a theory proposed by Carl Rogers who believed that humans tend to self-actualize, and has a crude co-relation with the theory of primary and secondary motives. The Theory of Self-efficacy proposed by Albert Bandura, reflects a personal judgment of one's own innate abilities. This set of beliefs would therefore influence every aspect of human behaviour and would determine success or failure. The Austrian Neurologist Sigmund Freud developed the ideas of id, ego, and superego to explain behaviour and motivation. These are the three components in the psychic apparatus proposed by Freud. The id is a set of instinctual desires, the superego plays a moralizing role, while the ego co-ordinates the two. Skinner's reinforcement theory states people only remember information that fits in with their prevailing thought patterns. Other related concepts include the 'Power motive' proposed by Alfred Adler, the 'Achievement motive' of David McClelland, and the 'Competence motive' of Robert White. Other theories such as 'Herzberg's Motivation/Hygiene two factor Theory' and 'Victor Vroom's Expectancy Theory of Work Motivation' have little relevance in our context.<sup>52</sup>

From our perspective, motivational levels can also be linked to the theory of mind-orientation. In most cases, an individual's mind-orientation is determined sub-consciously over a period through an internal assessment (co-relation with personal attributes, strengths, and attributes resulting from the process of enculturation) and an external assessment which is ratification with the environment. If this process is successful, motivation results, and if this process is unsuccessful, a partial or complete disorientation on some or many fronts may occur, leading to demotivation, and a loss of direction.

We also propose 'The inverted U curve' in Motivational Economics, which seeks to explain varying motivational levels in individuals and groups. This is an extremely practical approach, and can be ratified through time-honoured fieldwork and direct and indirect observation as well. The inverted U curve can be described thus; an indigent individual possessing no

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<sup>52</sup> The Oxford Handbook of Human motivation: Oxford University Press, Edited B. Richard M. Ryan

monetary resources or the means to uplift himself, may stay unmotivated for extended periods with little hope for redemption, and descend onto a downward spiral of demotivation. His motivation increases through external intervention (monetary or non-monetary incentives) only as far as this intervention is a vehicle of increase in self-motivation. However, beyond a certain level of external intervention, lethargy and inertia once again set in. The shape of these curves may vary widely from culture to culture, individual to individual and even within an individual over time. However, this always takes the shape of an inverted U, with a demonstrated kurtosis and skewness, sometimes skewing to the left or the right. There would be wide differences in the shape of this inverted curve between nations, socio-cultural groups, socio-economic groups, age brackets, gender and individuals, all reflecting cultural or personal attributes. Curves can also be aggregated, or studied separately. The shape of these curves also may tend to change with the passage of time. Here again, the Sociological Ninety ten rules must be invoked during the decision-making process. This approach is extremely useful in designing government schemes like Universal Basic Income and Minimum Nutrition programs, as the right product design can boost productivity greatly. However, the wrong product design may be dangerously counter-productive. Thus, success would depend on identifying the sweet spot.

In pure motivational economics, productivity is therefore a function of motivation

Thus,  $G = f(Mt)$

Motivation, skilling and education

Skilling is also a great enhancer of motivation. This is also true of appropriately designed education systems as well. Education systems must reflect cultural or societal orientation, individual mind-orientation, talents, preferences etc., and must be coupled with vocational and life-skills training. A minimal standard and quality of education is also necessary before the self-skilling process can kick in. This curve therefore slopes upwards from left to right, and tapers off gradually, as higher incremental levels of education yield lower marginal dividends. However, the resultant shape of the motivational curve will vary for different types of educational models, all other things being equal, and this is something that needs to be understood, and borne in mind by planners.

Lifecycle motivation curve

Motivational levels also tend to vary greatly with age. Studies have shown that motivational levels are high for adolescents and youth, but the motivation levels gradually decline thereafter. This curve is therefore inverted, and in the shape of a U, with a gradually tapering off right arm. Understanding this is extremely important for designing packages for specific age



groups. People who are confident about their retirement may also work harder, though this may again be counter-productive beyond a point.

We may also divide motivational curves into Short term motivation curves, Medium term motivation curves and Long term motivation curves or lifecycle motivation curves. The dynamics and the motivators of each of these may vary widely. In addition, Behavioural Economists have also shown that humans are biased towards short-term motivational factors and short-term goals, and tend to ignore long-term ones due to myopia or a fear of the unknown. Old-age security may however be a motivating factor by itself, and may inspire people to work more and save more. Too much of it, may be bad, and may bring in a sense of complacency. This may form an inverted U curve by itself, and needs to be investigated.

Thus, there are different kinds of loops we want to describe:

- The motivation, skill, self-uplift loop: Here the individual is motivated, keeps on skilling and learning, and uplifts himself.
- The demotivation sink spiral: Here, the individual is demotivated, and completely sinks.
- The complacency degeneration spiral: Here the individual becomes complacent, and does not self-improve or respond to inputs.

Also note the following:

- The motivation – skilling- productivity- opportunity- re-motivation spiral: In this case, the individual skills, finds suitable opportunities, and stays motivated.
- The motivation – skilling- productivity- non opportunity- demotivation spiral: In this case, the individual skills, finds no opportunities, and gets demotivated again. Hence, opportunity creation is as important as skilling.

Aspiration Cherishment and Aspiration Deficit also vary widely from context to context. These refer to the value and importance attached to aspiration and success among a socio-cultural group, a socio-economic group, or an individual, and the tolerance or non-tolerance for failure (often associated with social stigma) as well. These attributes could again form the basis for motivation. For example, very few people may aspire to success, wealth or riches in a society, and the intellectual classes may be non-existent or nascent. Motivational economics like every facet of Anthropological Economics, therefore, stresses the role of invisibles and cultural power in economic development.

#### Approaches in motivational economics

There are several approaches in Motivational Economics, and these include:

1. The Cultural Remediation Approach: Here, Cultural remediation forms the basis of enhancing individual motivation.
2. Individual reorientation approach: Here, Individual reorientation forms the basis of enhancing motivation through various approaches such as the carrot and stick approach.
3. Better education: In India, private schooling is considered to be much better than public schooling, and there is a wide gap between the two. In 1969, Taiwan made nine years of schooling mandatory as opposed to six years earlier. In Tamilnadu, the Nutritious noon meal scheme was made mandatory, and is being emulated by other states. This has led to a surge in school enrolments. Remedial education was carried out in Bihar by Pratham and other organizations with surprising results. Education therefore, is a vital tool for motivation and social change. Elitist school systems need not also be frowned upon. They may be complementary to the mainstream school system, and help create the Creative class.
4. Skilling: Human skills are a vital resource. Countries with abundant human skills will have a comparative advantage in industries that use human skills to a greater degree. Certain products such as electronics require a highly skilled labour force such as engineers, programmers, designers, and other professional personnel. Such products may gain comparative advantage in countries such as Taiwan, Singapore, Hong Kong that are better endowed with skilled labour. (Keesing, 1966). Government policies aimed at better education and training can create such an endowment, and enhance motivation. An extension of these programmes could be the provision of vocational training, life-skills training, assisted career planning, and assisted life roadmap planning.
5. De-addiction and removal of vices: Motivation can also be enhanced through de-addiction and removal of vices such as addiction to alcohol and tobacco, as these have proven to be major social ills in some societies including advanced western ones such as the USA, and this has often been accompanied by violence, and the withering away of life. In 2017, 19.7% of high-school kids drank in the USA, and the use of tobacco products in 2019 among high school children was 31.2% according to a survey. Addicts often begin from a young age, and such pernicious ills have often gnawed away at their vitality.
6. Self-confidence boosting measures: Another approach could be to build self-confidence boosting measures, both in the short-term and the long-term, as these are bound to have a cascading effect on motivation, and can boost productivity. This could include removal of vices such as racism, and social stigma as well.
7. Further research on motivation should cover aspects such as Indebtedness and motivation, types of financial instruments and their impact on motivation, different types of economic systems and their impact on motivation, the provisioning of social goods, and the provisioning of merit goods, and their impact on motivation etc.

### **Skill-based development models**

The concept of skill is important in many fields of social sciences, though many economists have tended to exhibit a rather narrow understanding of the term. Historically, the term 'skill' has been used to refer to the skills and expertise requirements of workers and technologists specializing in different trades. (Ainely, 1993; Keep and Mayhew, 1999). The concept of skill has gradually expanded over time to include complex skills including both core skills and allied skills such as linguistic skills (reading, writing, speaking and listening), numerical skills, logical reasoning, problem solving, continuous learning, soft skills, ability to work under pressure, interpersonal relationships, computer literacy, adaptation to technology, and theoretical and practical knowledge in different spheres. (Payne 1999)

In economics, all useful knowledge embodied in humans is referred to as human capital. Most of the variation in growth across countries is attributable to variations in Human capital development. Thus, education and human capabilities are core drivers of economic growth. (Aghion and Howitt 1992). The abilities of people also shape the structure and direction of the economy. Knowledge leads to innovation and improves both variety and the quality of products. Higher human capital also encourages entrepreneurship and innovation, which translates to demonstrably higher growth rates (Dakhli and Clercq 2004).

Jobs may also be classified on the basis of skillset requirements. Therefore, we have highly skilled labour, skilled labour, semi-skilled labour, and unskilled labour. Furthermore, skills change with time; some skills vanish or are rendered obsolete and new skills emerge and this process continues such that employees are forced to update themselves continuously. Alan Felstead et al have argued that people coming from different cultural backgrounds perceive skills differently, and have different attitudes towards learning (Felstead 2002). In economics, skill is one of the main ingredients of human capital. However, most economists ignore or downplay the social context of skill, and miss the wood for the trees. Skill is often seen as a mere set of repetitive tasks performed to a specified level of efficiency and the cultural differentiators such as language, education and gender are ignored. Thus, there is a difference in perception between economists and sociologists with regard to skills and human capital.

Thus, a Skill set matrix must be formulated taking into consideration all the factors described in this paper, including socio-cultural ones. These could include the concepts of socio-cultural advantage, culture-driven and culture-centric skilling and development patterns, cultural preferences, cultural non-preferences, cultural taboos, linguistic skills, linguistic barriers, religious factors, political factors, and a reconciliation between these and market requirements. Thus, skillset matrices must be prepared for each socio-cultural group, socio-economic group, and occupational group.

Any such matrix must identify current skillset statuses, skillset capability matrices, cultural barriers to skilling, skillset non-utilization, the aspiration skillset mismatch, negative skillset matrices, stimuli required to overcome barriers and gaps, short-term plans, medium-term plans, long-term plans, reconciliation with market requirements, identification of core thrust sectors, identification of secondary sectors, preparation of sectorial skillset plans etc. These inputs would provide inputs into short-term, medium term and long-term economic development plans. Thus, an aggregate skill set matrix for the economy as a whole must be prepared, and gaps along with attendant action plans must also be prepared. Relative and absolute linguistic ability and non-ability (along with linguistic barriers) must also form a major part of the planning exercise, and this paper is tied inexorably to the science of language dynamics. This would naturally lead to cultural differentials, and the inequality of potential.

We can also talk about the 'Skillset equilibrium' here; this would connote the natural self-skilling tendencies ingrained in, or attributable to a culture, its occupational patterns, or its natural orientation. These tend to be ossified, and change slowly over time, if at all, without external intervention. External intervention, if successful, may cause a 'Skillset equilibrium shift'; A 'Skillset composition lag', refers to a gap between skillsets associated with a socio-cultural group, a socio-economic group, in relation to market requirements, or in comparison to other rival groups.

A study found that most poor people engage in economic activities requiring very little skills, and seldom made use of their knowledge or education. In the city of Hyderabad in India, eight percent of the population were tailors, eight percent were fruit and vegetable sellers, seventeen percent were small general store owners, 6.6 percent were telephone booths owners, 4.3 percent auto owners, and 6.3 percent milk sellers. Except for tailoring, the rest of the jobs required very little skill. Thus, there was a wide gap between achievement and potential. The demand for different types of skilled profession cannot be assessed easily, but enhanced skilling should boost economic activity greatly.

According to the Oxford English Dictionary, (2004) training may be defined as teaching a particular skill or type of behaviour through regular practice and instruction. According to Armstrong, (Armstrong 1996) training refers to learning a specific task or job, with associated skills, while human development is an on-going process involving changing people or building on their latent talents and strengths. Thus, training is categorized into job-centred training of person-centred training. Training often leads to better productivity which may be defined as output per unit of input, but cultural aspects must be factored into any training process.

A talent may be defined as a natural aptitude or a skill. This is often believed to be acquired since birth, or acquired since a young age, often in a cultural context. Therefore, while we believe that talent is culture-neutral, different cultures may provide different environments

that allow specific talents to flourish. These talents must naturally be linked to economic activities, and marketable skills. It would be one of the Anthropological Economists sacred duties to understand talent in a cultural context, and evaluate it against the backdrop of a gamut of cultural and economic activities. The talent discovery process must also proceed to identify talents which can be related to a cultural context, and those which cannot. The two may require totally different approaches. Talent discovery and identification must also be built into the education system, along with career guidance plans and identification of core competencies and life skills, and underperforming or non-performing human resources identified.

Given that that the skilling process and the talent-discovery process may be impeded by several factors such as class mobility, cultural barriers, psychological barriers, social barriers, linguistic barriers, demand constraints or even ignorance due to micro or macro factors, remediation strategies must be drafted with care, and it stands to reason that time frames must also be realistic. In some cases, trade-offs and alternative uses of human talent may be explored.

One metric is to assess how readily people in certain environments pick up specific skills, so that this can be used as a basic input of economic planning. These can be used to determine the direction and nature of skilling programs which would vary widely between Gujarat, Tamilnadu, West Bengal and Odisha, for example, and also determine other policies and programs such as tax differentials between skilled labour and unskilled labour. Another important exercise that needs to be carried out is the relative skill assessment across nations, to identify comparative areas of strengths, and comparative and competitive advantages. This would form an important input into the overall economic planning exercise, and would be akin to 'National Human Resource Modelling'.

Several indices have also been proposed to evaluate and rank innovation capability and entrepreneurship. Examples of these apart from the Bloomberg Innovation Index, the EIU Innovation ranking, the Global Competitiveness Report, the Global Innovation Index by INSEAD, the Global Entrepreneurship Index, and others is the Global Creativity Index or CGI by Roger Martin and Richard Florida which ranks countries based on creativity, technology, talent and entrepreneurship. Attempts have also been made to assess the "Creative Class" in different countries, which is a class which plays a major role in driving economic development of a country. This class is present in developed countries to a greater extent, particularly to large cities. This is akin to an intellectual class, but a creative class is more directly translatable to the economic growth in the country, and includes several forces besides intellectual forces. Florida associates this with all kinds of creative juices such as rock and roll bands, creative art and hippie stars, but these have little relevance to our study. Needless to say, creative classes must be fostered and incubated, and a suitable ecosystem to nurture them created. The Indian

middle classes have played a great role in the country's prosperity in the recent past, but efforts to boost middle classes must naturally be counter-balanced with the skilling requirements of the wider population. The science of Anthropological Economics takes into cognizance the importance of science, innovation and technology as drivers of Economic growth. It however, also warns against the dangers of leaving out the majority of the population from the skilling process.

### **Growth models based on Cultural differentiators**

Socio-cultural and socio-economic differentials refer to ingrained differences between socio-cultural and socio-economic groups. These may be due to several well-entrenched factors such as educational and occupational preferences, differences in social and cultural make up, enculturation patterns etc. There are many different examples that could be quite obvious and apparent; for example, the Gujarati or Marwari community is known for its entrepreneurship and its enterprise; something that tribals in the Indian state of Odisha are not known for. This attribute has been known from time immemorial, and may even be traced back to the Indus Valley Civilization that flourished five thousand years ago. Thus, it is instructive to observe this kind of a cultural continuity for thousands of years. On the other hand, there are marked cultural differences between the Gujarati and Marwari community and the tribes of Jharkhand elsewhere in India. Thus, spatial transmission of cultural traits has not worked in all cases. One may also observe the Xhosa and Zulu tribes for example, to trace their integration or non-integration patterns with the rest of African society. Unfortunately, Gujarati and Marwari entrepreneurs are mostly still associated only with their low-end entrepreneurship. High-end business involving manufacturing of high-end technology products or professionally-run businesses have thus far eluded them; In low-end businesses, they undoubtedly excel, and have made an impact as far away as Uganda and Kenya; They were forcibly repatriated from Uganda during the time of notorious dictator Idi Amin in the 1970's, largely due to their relative affluence and success. The workaholic nature of Japanese youth in the 1970's is widely known, along with their legendary company loyalty. Changes to status quo in this case are being observed only very slowly. In Malaysia where there are three ethnic groups, namely Malays, or Bumiputras, Chinese and Indians, there are perceptible, cultural differences between the three groups which are enough to shape most of their worldviews and economic orientations completely differently.

Therefore, remediation strategies and roadmap-building must be carried out along with a socio-cultural or a socio-economic SWOT (or a Strength Weakness Opportunity Threat) analysis (This kind of an analysis arose in a completely different context a few decades ago, and socio-cultural analysis also forms a part of PEST analysis), and must be based on their inherent cultural strength, and differentiators. Models more attuned to our needs have been developed by

Shalom Schwartz, Fons Trompenaars and Charles Hampden-Turner, and have been reviewed elsewhere in this paper. This exercise can also be carried out using the existing core strength-complementary strength model. In this approach, existing core strengths are identified, and formally documented. Then, complementary strengths are identified in such a way that they add to core strengths, or remediate cultural roadblocks and deficiencies. For tribal regions of Odisha, the nature of economic planning must be different from that of Gujarat. Industries using natural resources may be promoted in Odisha, but anthropological and environmental damage must always be assessed, and the cons taken into consideration as well. In Gujarat, entrepreneurs may be lured to high-tech industries through skill-building programs. We may also refer to this concept as 'Foundational competencies' of culture, and this analysis can also be broken down for socio-cultural groups, socio-economic groups, and occupational groups. This must form the basis of government policy, and the concepts of comparative advantage can readily be extended here. One approach is the 'Group opportunity equalization approach' which is an extension of the 'Equality of opportunity' approach. In this case, an earnest attempt is made to ensure that the fruits of development reach all groups, but the ultimate choice of acceptance is left to those groups.

Values help shape the social fabric of society and help determine what is acceptable or unacceptable in that culture. Values can be expressed either at a group level, or individually, and individual values may arise due to the influence of family values, educational levels, moral standards, and religious tradition. Cultural values can greatly influence consumer perceptions and purchasing behavior as well. For example, consumers in countries such as the United States, tend to be individualistic and make purchasing decisions based on their own personal preferences. In countries such as Japan, the well-being of the group is more highly valued, and buying decisions are more greatly influenced by the well-being of the group, which is the family in most cases. Cultural values shape therefore preferences for goods as well, and determine macro-economic outcomes.

One approach to identifying cultural differentiators would be link it to Cultural taxonomies which could include language, symbols, religion, music, art, drama, cinema, folklore, marriage, cuisine, other aspects of tradition etc. While building a taxonomy, all dimensions of a culture such as values, norms, philosophies, principles, dogmas, ideas, beliefs, attitudes, symbols, traditions, ideologies, and artifacts should be included, and these must be studied in contrast with other cultures. Ideal cultural attributes such as honesty, sincerity, truthfulness, capability for hard-work, obedience, optimism, creativity, dynamism, future-orientation, discipline, punctuality, methodical approach and perfectionism (This is an open list) can be associated with a culture and culture-specific values quantified. This can also be accompanied by an evaluation of negative traits. All these should provide vital inputs to the planning process, as they would

serve as memory aids, and help identify cultural differentiators. Cultural differentiators will be crucial to the overall planning process. For example, Indian culture is known for its family value system, while some others are known for social cohesion. A few cultures are known for hard work, while others are known for their innovation or material orientation.

These differentiators will then be enhanced through a set of complementary factors, usually external in origin. For example, if a society attaches importance to education, this strength may be enhanced through vocational training or better linguistic skills. For non-remediable cultural deficiencies such as linguistic constraints, suitable workarounds may be adopted such as the exploration of alternative economic paths.

### **Welfare Maximization Approaches**

After the First World War, quantitative economic measures were developed and widely adopted, but these also attracted a lot of attention and controversy over the subsequent decades. The most important among these measures was the idea of GDP, or Gross Domestic Product, and GNP or Gross National Product, along with other derived measures such as Per Capita Income. The idea behind GDP was that it would constitute an effective measure of wealth by including agricultural goods, industrial goods and a wide range of tangible and intangible services into a single measure. These measures were further refined during the Great Depression and the Second World War.

Just as money is one of the most commonly accepted measures of wealth, price is one of the most widely used tools of measurement in Economics. But the temptation to measure everything in terms of price gives rise to serious conceptual problems and compromises human values. Thus, a millionaire's Rolls Royce may not necessarily be much more valuable than food aid to the starving or medicine to the sick. Private investments in luxury resorts may not be more valuable than public investments in health and education. The marginal utility of money may also vary based on the income levels of an individual. Thus, there are obvious limits to measuring everything in terms of money. Fossil fuel has bad externalities, but solar energy is associated with renewable and sustainable energy. Timber extraction does untold harm to the environment, yet mainstream economists fail to take this into account. The American Economist Simon Kuznets warned policy makers of the limitations of such models as early as 1934, with continuing criticism from William Nordhaus and James Tobin in the 1970's. Of late, David Pilling and others have raised alarm bells about the continuing obsession with GDP growth-driven policy prescriptions, and have called for paradigm shifts in economic thought.

The term development is however, a much more comprehensive concept that includes many socio-economic factors and non-economic factors such as health, education, life expectancy, social inclusion, social cohesion, gender equity, human freedom, democratic institutions and



the quality of governance; spending on infrastructure, education, science and technology, health, self-actualization needs and other domains impacting human and economic welfare form a crucial component of development. The idea of development is therefore much more qualitative than growth which relies extensively on quantitative measures. The term development therefore, greatly values mechanisms to measure the quality of human life. The concept of economic welfare was initially used to co-relate the impact of economic growth with the material living standards of households and individual citizens, rather than to focus on production alone. It therefore assigned unequal weights to different types of production like welfare spending and defence spending.

The idea of Human Welfare got a great boost with Amartya Sen's capabilities approach which emphasizes "a person's capability to have various functioning vectors and to enjoy the corresponding well-being achievements" to be the best indicator of welfare, thus shifting the focus from a more basic view of human welfare to human capabilities as determined by the environment. (Sen, 1985) However impressive this approach may seem, one criticism of this approach is that it is notoriously unreliable to quantify and measure. Human development plays a major role in economic growth, and Human Development Indicators were indeed developed, though incomplete. If economic policy is targeted towards the discovery and realization of human talent and potential in relation to a culture, and their comparative advantage in relation to other cultures, this will allow them to pursue occupations in which they are most competent, thereby boosting economic growth.

### **Gross National Happiness**

During the mid-1970s, Bhutan's King Jigme Singye Wangchuck, first developed the idea of gross national happiness or GNH, and believed that gross domestic product (GDP) was less important than GNH because GDP alone could not deliver happiness and well-being. The term was however probably coined in 1979 in an interview to a British journalist in Mumbai. The Bhutanese monarch also believed that GNH measured the quality of a country in more holistic way and believed that the beneficial development of human society could take place when material and spiritual development occurred side by side to complement and reinforce each other." The Constitution of Bhutan states that "The State shall strive to promote those conditions that will enable the pursuit of GNH." The idea of GNH was adopted by the UN General Assembly in 2011 when it passed a resolution advising other countries to adopt the Bhutanese model.

The four pillars of GNH are Sustainable and Equitable socio-economic development, Environmental Conservation, Preservation and Promotion of Culture and Good Governance. The nine domains of GNH are psychological well-being, health, time use, education, cultural

diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards. Each domain is turn comprised of subjective and objective indicators such as spirituality, positive and negative emotions, mental health, knowledge and values, working hours, sleeping hours, social support, community relationship etc.

The idea of Gross National Happiness is more or less in tune with our philosophy, but economic growth and development must not be compromised, and fieldwork, and ethnography-driven approaches must form the basis of evaluation of all such indicators. From our perspective, Gross National happiness which can be derived from physical health, mental health, and access to opportunities, for example, must be linked to economic policy, and its constituents such as social welfare schemes.

### **Growth models based on Cultural bottlenecks and Cultural remediation requirements**

Cultural Remediation refers to the process of identification of cultural flaws or lacunae in a given society, and we have already dealt with this idea in our previous papers. Examples of such bottlenecks could be social evils such as racism or the caste system, and cultural inertia, or non-readiness for change and modernization. This term is widely used in Public policy, and is equated with attempts to boost, cultural capital, change individual or cultural orientation, or reposition culture. The major problem in initiating cultural remediation is often the absence of a satisfactory definition of an 'ideal culture' to compare a culture with, though several utopias have been imagined often with mutually exclusive ideals. The values or the ideals or a dominant culture often dominate and become the yardstick over time, however undesirable they may be. Alternatively, an ideal culture or a set of ideal cultures is consciously chosen for a particular item in the cultural taxonomy, and adopted as the benchmark for remediation efforts. While initiating remediation efforts, the orientation of the culture needs to be taken into consideration, and the culture needs to be broken up into sub-components for more granular analysis. This is also known as a dimensional analysis, and lag elements may need to be remediated more rapidly. Remediation efforts may be either be short-term in orientation, medium term in orientation, or long term in orientation. They may be carried out by internal or external change agents, and remediation efforts may be superficial or deep (An example of the latter could be the desire to change enculturation patterns), and in case of the former, low-hanging fruit are identified for quick change. Culture change can be brought about through various techniques such as fiscal incentives, mentoring, counseling, or setting up advisory networks. Knott, Muers and Aldridge et al (Knott, Muers, Aldridge, 2008) state that cultural changes include changes to cultural capital (attitudes, values, aspirations, self-efficacy etc.),

changes to social norms and values, the process by which political narrative and new ideas shift the social zeitgeist over time, the process of normalization, etc.<sup>53</sup>

Several tools and approaches have been proposed to identify problems and bring about change in society (many took shape in an organizational context), but it is impossible to review all of the here. Among them is the Theory of constraints which was developed and popularized by the manufacturing guru Eliyahu M. Goldratt in 1984. This approach was made famous through his best-selling book “The Goal”, which was presented in the format of a novel. Even though this approach was developed in a manufacturing context, its potential is limitless, and is now being extended to various fields in the social sciences as well. In 1986, Goldratt set up the Avraham Y. Goldratt Institute to educate the public about his “Theory of Constraints”. The TOC has evolved from a production scheduling technique to a complete methodology which is concerned with bringing about change. According to Klein and DeBruine, Goldratt originally set out to devise an approach to identify and remediate bottlenecks in a production process, and views an organisation as a chain composed of many links, or networks of chains. Per this approach, constraints are identified and removed one by one so that a higher state of efficiency is achieved.<sup>54</sup>

William F. Ogburn introduced the concept of cultural lag in his book, “Social Change with Respect to Culture and Original Nature”, published in 1922, and this idea can be used as an input in the change management process. Ogburn has divided culture into material and non-material culture. Material culture refers to civilisation which includes tools, utensil, machines, science, means of transport and technology. Non-material culture includes beliefs, practices, customs, tradition, moral, values and institution like family, religion, education etc. Cultural lag typically denotes the difference in evolution and maturity between material and non-material aspects of a culture. Cultural lag arises due to cultural inertia, over-reliance on tradition, lack of social infrastructure, or several other factors. Identifying cultural lag is a crucial component of proactive change. According to the theory of Cultural Lag, Culture usually takes time to catch up with technological innovation, In other words, technological changes happen faster than cultural related changes and there is a mismatch between the rate of material progress and non-material progress involving intangible elements. This phenomenon may lead to social conflicts and often bring about cognitive dissonance to varying degrees and various forms of distress or maladjustment. This theory also states that different aspects of culture tend to change at different rates.<sup>55</sup>

### **Identification of low-hanging fruit for quick results**

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<sup>53</sup> Achieving Culture change: A policy framework, David Knott, Stephen Muers, Stephen Aldridge, January 2008,

<sup>54</sup> The Goal: Eliyahu M. Goldratt, Grover Publishing, 1984

<sup>55</sup> Social Change with Respect to Culture and Original Nature, William F. Ogburn, 1922

An ever greater number of intellectuals across domains recommend identification of low-hanging fruit for quick results. These refer to fruit which are ripe for picking and harvesting from an early age, easy-to-accomplish tasks, or easy-to-solve problems. The idea behind this approach is manifold. The first is that it sets the ball rolling easily and sets the culture or entity on a growth trajectory early, and instills confidence in all parties involved so that greater attention may be paid to more complex and challenging problems at a later date. This idea is widely used not only among Six Sigma practitioners and process improvement experts, but now has some currency in the social sciences as well. Low-hanging fruit typically have high returns in relation to the time and money invested; they also yield dividends from an early date.

### **Growth models based on Ethnography-revealed preferences**

In this approach, growth models are determined based on individual and collective preferences revealed during the course of suitably-designed ethnographic techniques and prolonged fieldwork. In many cases prolonged ethnography coupled with other quantitative and qualitative methods current in the social sciences such as the use of interviews, questionnaires, case studies, TAT's emic and etic approaches, and dialectical approaches may be a precursor for policy formulation, and such initiatives can often serve as launch pads for creative and proactive thinking. As a matter of fact, we strongly endorse the idea that policy conceptualization should be the very *raison d'être* of econoethnography. For example, dissatisfaction with government initiatives discovered during fieldwork, may generate novel methods to promote individual- government cohesion for social welfare, or community participation. This field is unfortunately virtually non-existent today, despite a vast untapped potential, and most of what passes for economic ethnography, has been directed at satisfying western intellectual curiosity, a remnant and a relic of a colonial mindset.

### **Socio-cultural or socio-economic Group size driven approaches**

In other cases, the size of the socio-cultural group or the socio-economic group may be taken as the basis for planning and implementation of policy initiatives, or allocation of time and budget resources. The importance of this approach must not be discounted, as it will ensure that development efforts and initiatives are impartial to groups, and are constrained only by their own preferences. This idea can be readily extended to occupational groups as well. Thus, the underlying principles of most of the core concepts in the social sciences such as Action Anthropology will never be compromised with. This stands in contrast to urban-centric or location-centric planning models, and the requirements of this approach may be suitably ingrained into developmental policy, as they will introduce several fundamental checks and balances into the planning process.

### **Planning based on relative importance of economic activities (Based on backbone of economy, pillars of economy) etc**

Nations specialize in goods they can best produce. Thus, economic theory has come a long way from the days of mercantilism several hundred years ago and the days of Absolute Advantage promoted by Adam Smith to the theories of Comparative advantage and Opportunity Cost analysis by David Ricardo, Gottfried Haberler and others. As can be easily understood, much of the land in the United States has a comparative advantage in agricultural production and is therefore devoted to the large scale promotion of that activity. Hong Kong, with its huge population and tiny endowment of land, allocates virtually none of its land to agricultural use, or even industrial activity for that matter; both these options would be too cost-ineffective, and its land is therefore devoted largely to non-agricultural and non-industrial use. The ideas of comparative and competitive advantage were fundamental revolutions in their own right; but theories of absolute and relative cultural endowment would aid in economic and cultural development greatly, and would reinforce the role of Economics as the queen of the social sciences. This idea must represent one of the pillars of Economics in the Twenty-first century.

Another related approach would be based on the analysis of the relative importance of various economic activities in an economy, and using it as a basis for thrust-generation. For example, agriculture is often seen as the backbone of the Indian economy, given the large area of fertile land in the country. India has always been a country dependent upon agriculture, and that sector supports half the population directly or indirectly. In 1951, 69.5% of the working population was engaged in agriculture. Even though that percentage has since declined, it still supports a significant proportion of the labour force even to this day. India therefore invested heavily in the construction of multi-purpose dams, and the 1950's are often seen as the heyday of large dam construction. The Green revolution, the White revolution, the Grey revolution and the Aquaculture revolution made India a mini agricultural superpower, and it is now a leader in the production of many crops. In spite of a rapid increase in irrigation coverage, agricultural output has been volatile, and is still subject to the vagaries of monsoon. Moreover, land holdings are small (most holdings are less than two hectares) – much smaller than the USA on an average – and this, along with profiteering by middlemen, and razor-thin margins, act as a disincentive for most farmers to continue in the sector. In recent years, India has been working towards organic farming, drought resistant crops, water harvesting and conservation techniques, drip irrigation, contract farming, solar-based power, measures to end the monopoly of APMC's and Mandis, and greater farm mechanization. Even though most African nations lag behind India in agriculture in many respects, the ground realities are much the same. African nations, like India must adopt home grown development models, and would be ill-advised to adopt western developmental models without an internal ratification process. Many ideas to

boost agricultural productivity remain unexplored such as value addition, and changes to tax regimes.

### **Planning based on quantitative measurements**

The Lorenz curve which is graphical representation of wealth distribution and was developed by the American Economist Max O. Lorenz in 1905, can be readily extended for an analysis of socio-cultural groups and socio-economic groups, and will be an indicator of the structure of those groups. In this case, the actual curve is compared with the equi-distribution line to arrive at the actual distribution of wealth. Another useful measure is the GINI co-efficient which was developed by Italian statistician Corrado Gini in 1912. This comprises a range of values between 0 and 1 with higher numbers representing higher inequality. This is computed as the ratio of the area between the Lorenz curve and the equi-distribution line, and the area below the Lorenz curve. The GINI co-efficient tends to be higher for developing countries, but there are wide variations in developed countries as well. For example the value for the USA is much higher than most European countries representing higher inequality. The Lorenz curve is now being extended for a wide variety of other purposes such as education and health spending. For the purpose of our study, an investigative analysis of such differences must be carried out, and the differences traced to social and cultural factors, and factored into the 'Hypothetical Wealth transfer model'. Thus, cultural diversity, social problems, and internal autarchies would all lead to higher co-efficients. It would also be illustrative to link this to government policy, and identify such co-efficients. These two would represent useful root cause analyses and causal analyses.

Another useful approach that must be adopted is a causal analysis or a cause and effect analysis. This is usually carried out by constructing a fishbone diagram, also known as an Ishikawa diagram or a cause-and-effect diagram. This is represented by a fish with the problem emanating at the head, and problems being traced all the way to the spine. However, from our perspective, analyses must have a social and cultural flavour, though other factors must also be taken into account. For example, the success of birth control programs may be related to factors as diverse as religious taboos, cultural taboos, education of women, attitudes of men, and availability of information. Intelligently thought through measures can help assess more tricky aspects of society such as socio-economic integration and non-integration within and between socio-cultural and socio-economic groups, cohesion within and across groups, cultural, social and economic polarization etc. More complex analyses such as an understanding of the causes of differences in per capita incomes across nations can be carried out which could keep researchers busy for decades.

Thus, boosting Socio-economic integration can boost overall economic activity by enhancing wealth transfer and internal trade and commerce, and this can be done though the elimination

of cultural and social barriers. This is another instance of economic theory being grounded in the principles of the social sciences. Use metrics of socio-economic integration would include the differences in literacy rates, education levels, linguistic proficiency, infant mortality, life expectancy, total fertility rates and maternal mortality rates. While carrying out such an analysis, aspects that can be remediated easily must be distinguished from aspects that cannot be remediated easily, and different strategies adopted for each. Anticipated limits to socio-cultural integration and socio-economic analysis can also be factored into such an analysis. Non-anthropological differences that can be traced to social and cultural factors e.g., lack of credit, can also be assessed. Ethnographic and fieldwork must be widely used along with a gamut of quantitative and qualitative techniques to assess aspects such as impact of culture and education on birth rates, effects of culture or entrepreneurship, and impact of various social security systems on birth rates.

Dimensional analysis would include analysis by dimension- for example, gender differences in education, or differences in education by religious group, accompanied by a cultural or a social root cause analysis. This must be accompanied by slice and dice techniques, a term that originated in the kitchen. Thus, data mining techniques are widely used by organizations, but not so widely used by Economists yet, and it would prove to be extremely useful to rectify this anomaly. The efficacy of interventions such as educational changes, changes in health care policy, changes in social welfare scheme can also likewise be assessed by means of quasi-experimental techniques such as before and after experiment, longitudinal study, panel study etc.

### **Growth models based on unfulfilled Anthropological potential**

Societies have enormous human potential, much of it unrealized and unquantified. Unfulfilled potential therefore relates to unrealized individual and collective human ability. Human mental, intellectual, and psychological capacities continue to develop and unfold as knowledge and human accomplishment expand manifold, and technology expands both fulfilled and unfulfilled human potential. Economists need to understand what constitutes human potential, its downstream implications and how to develop and amplify it in a cultural context. This potential would be determined to a large degree by both collective and individual traits. Collective traits include social capital, cultural capital and the role played by institutions such as the education system, legal framework, and public health initiatives which serve as enablers. Individual traits ride atop cultural values and frameworks, and magnify or are magnified by them. The latter may include aspects as far removed as physical fitness, diet, mental make up, attitudes and vision for life, and an environment conducive to development of physical and mental abilities. Recommended approaches therefore, include both cultural remediation and individual life-skills

building from an early age, in what may be called the lifeskills and lifecycle approach. Infrastructure availability and knowledge provisioning would play a major role too.

### **Constraints-based planning (and Sustainable development)**

Constraints-based planning can be traced to the work of Israeli researcher Eliyahu Goldratt who introduced his famed 'Theory of Constraints' in the 1980's in a production context. Attempts have been made to extend these ideas outside the framework of manufacturing processes, and more recently to the social sciences.

This approach includes a series of well-thought through sequential steps such as identification of a system's constraints, a decision to exploit the system's constraints and work around the constraint, subordinate everything else to the constraint, attain a higher state of equilibrium, find a new constraint and repeat the process such that a continuous process improvement strategy is reached. Thus, from our perspective, physical constraints (such as land), environmental constraints, social constraints, cultural constraints, financial constraints, demand constraints, supply constraints, and technological constraints must be identified and both remediated, wherever possible, and used as critical inputs into the planning process. Thus, planning and growth models would vary from one geographical context to another, and through time. For example, a new mantra that was introduced in Indian agriculture in the 2000's was 'more crop per drop', symbolizing that water had become the new constraint, was a precious and a finite resource, and yield assessment without constraint identification were meaningless. Therefore, this approach is also linked to sustainable development models, and 'aeternitism', and the Anthropological Economist must be well-versed with latest sustainable development technologies and use them in his modelling.

### **Deconstruction**

Deconstruction is an idea of critical questioning commonly attributed to post-modernism. This idea developed in a hermeneutical context, and is attributed to Jacques Derrida, a student of Michael Foucault. This is also often related to the contributions of school of post-modernist ethnography or the "Rice circle" comprising Anthropologists of the Rice University, Texas who viewed ethnography in a completely different way. These include, Paul Rabinow, Stephen Tylor, George Marcus, Michael Fischer, Vincent Crapanzano, James Clifford and the like. According to Erikson and Nielson (2008), to deconstruct a text, we need to identify centres of power, and look for marginalized expressions curtailed by those centres of power. These could also be referred to as marginal centres of power, or centres of non-power. Although the idea of deconstruction originated in a completely different philosophical context, some of its underlying concepts and philosophies can be readily extended to the field of Anthropological Economics, by developing and reinforcing theories and paradigms that make sense beyond



main centres of intellectual power, or economic influence. Thus, theories and concepts must suit the requirements and needs to centres of marginal power and non-power. Thus, taken-for-granted paradigms are constantly challenged, and the subjectivity and the cultural relativity of the human experience always emphasized. (Spiro 1996). Thus, observers can never be unbiased, and positivism has its own limitations.

### **Other applications of Anthropological Economics**

We now list the other potential applications and uses of Anthropological Economics below. While this does not purport to be a complete list, it would serve to illustrate the mind-boggling power and problem-solving capacity of this new field:

#### **Culture and money**

Human economic activities greatly increased from the dawn of the Upper Palaeolithic age some 30000 years ago, and further intensified during the Neolithic revolution which began in the Levant some 10000 years ago which saw the advent of agriculture and animal domestication, and a move away from hunting and gathering. However, even during this period, most economic activities were still subsistence-driven, and group cohesion remarkable. A study showed that even the Neanderthals who lived several tens of thousands of years ago, took care of the sick and the infirm, something which is not common even in today's world. Even in most early Chalcolithic civilizations, the barter system appears to have been widely used, as money was not invented yet. Materials used for barter in ancient societies sometimes served as mediums of exchange. Examples of such goods included beads, shells etc., and even livestock and grain. Some early economies also appear to have been based on 'reciprocal altruism', and even gift economies appear to have been common. Even though accounting for economic transactions appears to have been common in many early civilizations as evidenced from accounting tablets (E.g. Sumerian Clay tablets), money in its present form appears to have been a relative late comer on the economic scene. Even though shekels were used in Mesopotamia, and seals in the Indus Valley Civilization, (nature of usage disputed), and bronze knives and spades in the Zhou dynasty, the first known currency was created by King Alyattes in Lydia only in 600 BC, and the earliest bank notes date to only around 1661 AD.

The primary functions of money appear to have been relatively unchanged over the years; Money acts as a measure of value of goods, and as a measure of value of other currencies in some cases. The value of money however decreases with time due to inflation, and foreign exchange rates are often volatile. It is also commonly used as a medium of transaction for all goods and services in a territory, and is also used as a store of value. In many cases, it is also used as a standard for deferred payment.

Different cultures attach different levels of importance to money. Some cultures are more materialistic and some cultures, less so. Materialistic cultures often tend to value human achievement and accomplishment, and there appears to be a strong co-relation between the two. Thus, culture, societal-orientation, individual-orientation, and economic progress are tightly inter-linked, and the value and importance attached to money and material progress play a crucial and a critical role in economic development, and in determining consumerism and consumer behaviour. We may refer to this as money-centrism, and econo-centrism. The idea that culture plays a major role in economic development goes back to Max Weber who, in his work "The Protestant Ethic and the Spirit of Capitalism," argued that culture was the driving force behind differences in economic development. This idea found some support in the writings of Montesquieu as well. Weber's theory was however contradicted by Karl Marx, who viewed culture as determined by the level of economic development and the economic interests of social classes. Although Landes (1998), Banfield (1958) and Putnam (1993) have argued that culture played a major role in determining economic progress, there has so far been little scholarly work examining the role of culture on economic growth and development.

Marx was a strong advocate of money's positive contribution to the economy, and spent many years researching the history of money. The Economic Anthropologist Karl Polanyi is often cited as an anti-market and anti-money thinker, mainly because he argued in "The great transformation" that the miseries of the twentieth-century world were the direct outcome of market-driven economies. Others argue that Polanyi was however, not a straightforward critic of market institutions and money and was not advocating their abolition" (Dodd 2014). According to Polanyi, "Money is not a decisive invention; its presence or absence need not make an essential difference to the type of economy. . . . Money, like markets, is in the main an external phenomenon, the significance of which to the community is determined largely by trade relations" (Polanyi 1944).

Money is also seen as a cultural differentiator, differentiating successful countries from less successful ones. It is also seen as a status symbol, and a marker for cultural and economic mobility, differentiating successful individuals from less successful ones. It therefore plays a major role in economic and social stratification. (Frank & Cook 1995) (Massey et al. 2009). It also accentuates and perpetuates cultural differences and stereotypes. Most surveys have indicated the Blacks have tended to be more indigent than whites, and revel in a 'culture of poverty'. They also tend to accord less importance to wealth and money than whites do. Religion and religious attitudes have often played a major role in determining economic outcomes, and some religious philosophies have frowned upon materialism, and the acquisition of wealth. In some cases, it money, or the absence of it, creates a complex set of relationships between the individual, the family, and the state, and dictates government welfare policy, and wealth redistribution mechanisms.

Some Economists have proposed the Constancy of the Marginal Utility of Money which states that the marginal utility of money is constant. This is indeed one of the pillars of Alfred Marshall's Cardinal Utility Analysis, and states that the marginal utility of most commodities diminish, the marginal utility of money does not. This assumption was first introduced by Daniel Bernoulli, but was later adopted by Alfred Marshall in his book 'Principles of Economics'. This must be criticized at the outset for being unrealistic and over-generalized, but Marshall chose to ignore all criticism, and proposed the constancy of the Marginal Utility of Money as one of his core assumptions. Money does lose its sheen near-universally beyond a certain point, and this aspect must vary somewhat with culture. Thus, from our perspective, the Diminishing marginal utility of money must be constructed for different socio-cultural groups and different socio-economic groups. As usual the Sociological Ninety-ten rules apply. This is related to the Marginal Value of money which was proposed by Daniel Bernoulli in 1738. It states that the value ascribed to every additional unit of money decreases as an individual acquires more and more goods. This observation was also made by Richard Easterlin who showed that people in wealthy countries were not always happier than people in poor countries. Behavioural economists Botond Koszegi and Matthew Rabin have proposed a theory of reference based consumption which states that individuals consume goods benchmarking consumption levels against a reference point. This makes sense from our perspective, and could explain the real-world behavior of a vast majority of economic actors.

Cultural and Anthropological Economists should also attempt to document the 'Social and cultural functions of money' which could include, among others, the provision of individual self-esteem, financial independence, fostering of family values, provision of old age security, happiness, physical and mental health benefits, its role as a personal differentiator, its role as a social and a cultural differentiator, and a source of national or cultural prestige or pride. These would, from our perspective be as important as the mainstream functions of money, but have been largely been neglected.

Thus, there could be many theories of money in Anthropological Economics, and these could include:

- Money-Happiness co-relation model: In this case, money is seen as a harbinger of happiness, as happiness is linked to prosperity and wealth.
- Money-Well being co-relation model: In this case, money is strongly associated with well-being and physical and mental health.
- Personal Status modifier approach: In this case, money is seen as a tool to personal emancipation, and social and economic mobility.

- Family status modifier approach: In this case, money is associated with family values and an upliftment of the family's status.
- Socio-cultural differentiator approach: In this scenario, money is used to differentiate a culture or a sub-culture from other cultures or sub-cultures, and is used as a potent tool in cultural rivalry.
- Money human lifecycle approach: In this case, an attempt is made to use money in different ways throughout the human lifecycle. During his youth, an individual tends to earn and grow his money; however, his attitudes towards money change throughout his lifecycle, and he may use it for his social security needs or his medical needs as he grows older.
- Money short-term motivation approach: In this case, money is used to build up short-term confidence levels thorough building up of financial reserves, etc.
- Money long-term motivation approach: In this case, money is used to build up long-term confidence levels thorough reskilling, re-orientation in life, etc.
- Money-cultural values co-relation approach: In this case, money is used to reinforce and uphold cultural values such as independence, charity etc.

### **Human nature as the basis of Economics**

From an Anthropological perspective, human beings are animals, governed by the laws of biology. Life, death and biological imperatives are biological processes, and are common to other animals too. Human nature refers to a set of inherent characteristics which all humans share, and a few of these are common with other animals, too. Even though most ancients such as the Greeks made an effort to understand human nature, much progress on this front has been only made in recent times, and a crucial debate that still rages in academic circles is the 'nature versus nurture' debate. The Webster's Dictionary definition of human nature is "the essential essence of who we are collectively as human beings." These refer to traits, behaviours, and characteristics intrinsic to humans (rooted in Genetics) and which cannot be changed without changing the basic characteristics of humans. These therefore differ from socially acquired process such as learning, acculturation, enculturation etc. Other writers speculated extensively on human nature. For example, Thomas Hobbes articulated his ideas of human nature in his two books, *De Cive* published in 1642, and *Leviathan* published in 1651.

In the 1800's, Darwin's theory of evolution traced human evolution to primates. From this revolutionary and path-breaking idea, emerged the modern scientific study of humans in fields as diverse as biology, anatomy, physiology, genetics, psychology, sociology and anthropology. Specialists in these fields have developed modern theories of human nature which are still being refined with new data. Some scientists such as the American Biologist E.O. Wilson, and Evolutionary Biologist Richard Dawkins, believe that human nature must be traced back to the

behaviour of primates. Others believe that fears and anxieties were hard-wired into human and pre-human species during millions of years when these species were prey to wild beasts. Some researchers also believe that bipedalism, the use of the thumb, hand-eye co-ordination and the use of tools were also determined by environmental factors.

Other specialists came up with unusual explanations. For example, the Austrian psycho-analyst Sigmund Freud believed aggression was a major element of human nature which enabled survival, and this idea was developed from early times. The Swiss psychiatrist Carl Jung believed there was a collective unconscious in all humans. The Austrian medical doctor Alfred Adler developed theories about interpersonal struggles for social dominance. The American psychiatrist Harry Stack Sullivan believed humans had fears and anxieties derived from inhibited communication patterns. The America-German psychologist Erik Erikson believed social ambiguity in a society could produce confusion in individuals and a tendency to follow wrong role models. On the other hand, American psychiatrist Irving Janis developed on the idea of “group think” which derived from human beings’ tendency to make collective decisions, arising from a tendency to suppress individuality.

The idea of the Psychic Unity of Mankind was first proposed by the German Anthropologist Adolf Bastian. He made many contributions to Ethnography and Anthropology, and was influenced by the works of Johann Gottfried Herder and Alexander von Humboldt as well. He also greatly influenced later Psychologists and Anthropologists such as Carl Jung, Frans Boas, Edward B. Tylor, Julian Steward, Radcliffe-Brown, Fredrick Barth, Maurice Godelier, and many others. This theory, which is one of the foundations of our philosophy, states that all humans, regardless of culture or ethno-biological identity, have the same cognitive or psychological set-up, and are driven by similar urges, proclivities and guiding principles. Even though there may be individual variations, these will be culture-neutral and neutral to ethno-biological identity. Thus, an East Indian boy, raised entirely in an American set-up, may behave exactly as an American does, though there can be a few exceptions caused by physical characteristics, and social stigmas and cultural thought processes associated with such factors. On the other hand, values, norms, institutions, and behaviours may vary widely from culture to culture due to factors such as parenting and enculturation, and these play a major role in personality-development and value formation. Bisin and Verdier (2000) and others have shown that parental transmission of culture is a fundamental determinant of the cultural values of individuals, of society, and the transmission of values from generation to generation. This would be compounded by societal values, and other factors impacting personal identity formation and individuation as well. Therefore, values and ideals would vary widely from context to context, and would often override over-arching human values. Economists must also counter-balance all these forces, and a wide variety of fields in Economics such as Welfare

Economics, and Behavioural Economics must take these opposing forces into consideration. All such fields may therefore require culture-specific extensions and re-examination.<sup>56</sup>

### **Culture and work**

Work is an essential part of any economic activity, and is indeed tightly co-related to culture. This is why economists must study work in relation to culture, and use it to fashion a society's economic orientation, and build viable economic development models. This would include a study of not only work and work habits, but also a study of leisure, recreation and entertainment patterns, and aspects such as workaholism, presence or an absence of a work culture or a work ethic and a work-life balance, all in a cultural and a social context. The term work-culture consists of two elements work and culture, and the sum total of these two is greater than each of the parts. Work, business and job-orientations are some of the primary individual mind-orientations that we discussed, and work is often either seen as a means to achieving economic goals, or as an end in itself. The importance accorded to work may also stem from a desire to fulfil one's abilities, competence and goals, acquire new skills, lead a productive and a rewarding life, and attain self-actualization. Productivity is also tied intrinsically to culture, and economists must take this into account. Productivity-boosting technique must also vary from context to context, and the scope of this sub-field of study is vast and may even be tied to agricultural and industrial productivity.

Work culture also impinges on Organizational Culture which is the soul of an organization, and this in turn drives economic growth. It can be evaluated through an assessment of team work, openness, active involvement of employees, a desire to learn, participative decision making etc. Organizational culture expert, Edgar H. Schein defines work culture as "a pattern of basic group assumptions that has worked well enough to be considered valid, and therefore, is taught to new members as the correct way to perceive, think and feel." Pettigrew (1979) on the other hand, identifies "work culture as the system of personally and collectively accepted meanings of work, operating for a given group at a given time'. According to Peters and Waterman (1982), "Work culture is defined as a system of 'shared values', which results in high performance in organizations". In addition, Erez and Earley (1993) also state that the success of organizational strategy and managerial techniques depend on cultural values and norms since employees interpret the meaning and value of various managerial techniques in relation to their own cultural worldviews. These would therefore require the attention of Anthropological Economists as a vital part of strategy and policy formulation.

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<sup>56</sup> Generic Identity Theory for the Twenty-first Century: Towards grand unified approaches in identity formation, identity transformation and identity dilution or neutralization, Sujay Rao Mandavilli, Elk Asia Pacific Journal of Social Sciences Volume 5, Issue 3, 2019

For example, Korea's unique style of corporate culture has played a role in its economic success, and Confucianism has played a major role in influencing the work culture of both Korea and China. It has therefore emerged as a viable alternative to the Western style of management philosophy, and its associated corporate culture. Many emerging countries like China are attempting to build a unique corporate culture by learning from the west, Japan and Korea as well.<sup>57</sup>

The work culture of Japan is quite different from the west, and much has been written about it. (Albegglen & Stalk, 1985) An important principle in Japan is the virtue of work, and work is a central value. It gives meaning and pleasure in life, and this principle is instilled in an individual from a young age. The Western outlook views results achieved with minimum effort and work as an accomplishment. A great deal of importance is accorded to the result, and not to the energy and time expended. In contrast, Japan attaches a lot of importance to hard work, and hard work is one of the criteria for evaluation. The Japanese also cherish group work and group harmony more than in the west where individualism is honoured, and many organizational initiatives are often put in place to promote this ideal. Loyalties towards organizations are high in Japan, and companies make a great deal of effort to promote loyalty. Attitudes are however changing in Japan, and many companies now hire temporary workers in addition to permanent ones. (Taka and Foglia 1994)<sup>58</sup>

India, on the other hand has no quintessential corporate management style to speak of, and work culture in India was hitherto casual. Of late, there has been a percolation of western management styles in Indian organizations. Very little has been done to arrive at an ideal corporate culture from an Indian perspective, leave alone analyze Indian corporate culture from a macroeconomic perspective. A study of interaction patterns and synergy building between government agencies and private enterprise is another area of promise. Japan excelled at this when India had still latched on to the socialist bandwagon, but very little progress has been made decades later. Other aspects that must be borne in mind are human resource policies, hiring policies, retrenchment policies, compensation packages, holiday packages, work hours, and design of multi-cultural workspaces, all of which must have a cultural basis.

### **Better recession management**

In economics, a recession may be defined as a business cycle contraction when there is a general decline in economic activity. Recessions may occur when there is a widespread drop in

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<sup>57</sup> South Korean Corporate Culture and Its Lessons for Building Corporate Culture in China, Choong Y. Lee, University Professor, Pittsburg State University, USA, Jennifer Y. Lee, University of Pennsylvania, USA

<sup>58</sup> MANAGEMENT RELATIONS IN THE WORK CULTURE IN JAPAN AS COMPARED TO THAT OF THE WEST, Ruth Wolf, *Interdisciplinary Department of Social Sciences & Economics Department, Bar-Ilan University, Ramat Gan, Israel*, *Innovative Journal of Business and Management* 2 : 5 September – October (2013) 116 - 122.

spending triggered by various events, such as a financial crisis, an external trade shock, an adverse supply shock, the bursting of an economic bubble, or a large-scale natural disaster such as an earthquake, a drought or a pandemic, though the latter are relatively uncommon. Many economists have identified crude rules of thumb to identify recessions, and the most common one is two consecutive quarters of negative growth, others being unemployment-driven metrics or decline in business sentiment.

The IMF's definition of a Global recession as of 2009 was: "A decline in annual per-capita real World GDP (purchasing power parity weighted), backed up by a decline or worsening for one or more of the seven other global macroeconomic indicators: Industrial production, trade, capital flows, oil consumption, unemployment rate, per-capita investment, and per-capita consumption." Recessions are characterized by high unemployment, loss of business sentiment, psychological distress, and adverse health effects. A severe recession where GDP declines by ten percent or more and is prolonged – lasting three or four years or more- is referred to as an economic depression.

The worst depression in human memory was the Great Depression which began after a fall in stock market prices and a Wall Street Crash towards the end of 1929 after a prolonged boom, and continued till the end of the 1930's. Even though the Great Depression began in the USA, its effects were felt throughout the world. President Herbert Hoover, who believed in laissez-faire economics and free enterprise, refused direct assistance to the needy, but encouraged hard work, and asked businesses not to lay off workers. He also encouraged private charity. He imposed tariffs on imports, but this boomeranged badly, and other nations imposed retaliatory tariffs. All this earned him a bad name and pejorative terms such as hoover villes or shanty towns, hoover flags or empty pockets, and hoover blankets, or newspaper blankets began to be associated with his presidency. This eroded his popularity, and he lost the election in 1932. His efforts to deal with the depression such as the formation of the Reconstruction Financial Corporation were inadequate, and too late. Roosevelt's 'New Deal' which focussed on relief, reconstruction and recovery and also the creation of permanent assets, is widely seen as having been successful, but only the Second World War decisively pulled America out of the Depression.

The world economy has experienced four global recessions since the Great Depression: in 1975, 1982, 1991, and 2009. In each of these recessions, there was a contraction in annual real per capita global GDP and a worsening of other key indicators of economic activity leading to wide-scale disruption and human misery. Of these, the 2009 global recession was by far the deepest and most synchronized episode among the four.

Several approaches can be advocated for better recession management, and this includes the identification of recession inelastic goods, and recession proof-industries and economic



activities such as agriculture. A well-diversified economic structure with a reliance on diverse and independent i.e. non-related sectors and industries may help too. Measures to boost purchasing power of diverse occupational groups can help too, along with a thrust on the welfare of diverse socio-economic and socio-cultural groups. A study of trickle-down and trickle up patterns of wealth, and studies of equality and inequality of wealth must be a precursor to better recession management. A study of savings and investment patterns, and a study of personal wealth creation patterns such as asset formation can help too. An emphasis on primary and culture goods can help too. Likewise stimulus packages must be well-thought out, and must be analysed from an Anthropological perspective as well- they must boost the purchasing power and the morale of sections of the population that matter the most, and sectors of the economy that are crucial to economic growth. Thus, stimulus packages must also be accompanied by a trickle down or a trickle up analysis, an analysis of income and demand elasticity's, and must as far as possible, also linked to productivity. Recovery measures may be categorized based on their time horizon, as sustained recovery may in many cases be possible through innovation, or a new set of conditions and paradigms. Thus, an investment in human resources is also important, but the results will be realized only in the long-term.

A Micro-analysis and a micro-economic basis of macro-economic factors and macro-economic risks may also be explored for possible remediation, and better recession management. For example, the USA may be inherently unstable due to factors such as a high level of personal indebtedness due to mortgages, near-absence of a large agricultural sector due to cultural alienation, a private banking system, and a high level of imports and cascading effect of petroleum imports etc., in spite of its economic resilience. Franklin D Roosevelt's belief that every person had to be given an acre to allow him to fend for himself in case of an emergency would be music to the ears of UBI proponents, but the economic and anthropological costs of such proposals need to be taken into consideration. These would call for criteria for assessing long-term macro stability involving both anthropological factors such as social support systems, lifestyle choice, divorce rates, family support systems, extended family support systems, social cohesion, number of breadwinners in the family, diversity of income, hiring and firing patterns in the economy, family encumbrances, savings and expenditure preferences (Social choice theory) and non-anthropological factors such as economic diversity and presence of legal and physical infrastructure, political stability and would also help in the creation of long-term macro stability indices.

### **Smoothing the effects of the 'Phugoid cycle'**

A phugoid or a fugoid cycle is an relatively long-period aircraft motion where the aeroplane pitches up and climbs, and then pitches down and descends, accompanied by speeding as it goes upward, and slowing down as it goes downhill. This term was coined by British

aerodynamicist Frederick W. Lanchester in 1908, and is derived from the Greek word meaning 'flight', 'to escape' and 'type'. Given the ambiguity of its etymological origins, we take the liberty of extending its use to non-aviation contexts.

Most ancient civilizations such as magnificent Egypt, influential Mesopotamia, and the grand Indus Valley Civilization, went into terminal decline, never to rise again due to several factors both cultural and political. The intellectual powerhouse that was Ancient Greece also went the way of old world civilizations, and several centuries later, the whole of the erstwhile civilized world was in the Dark Ages. The Fall of Rome can likewise be attributed to several causes such as economic troubles, political instability, and invasions by barbarian hordes. By 1500, most of the dark ages were behind Europe, and it was on the cusp of an intellectual and a scientific revolution. Thus, the dark ages gave way to the renaissance and the enlightenment. The advent of exploration and colonialism saw the rise of European nations as superpowers, and the relative decline of Europe after the dismantling of colonialism was marked by the rise of the USA. The Post Second World War era saw the rise of many new industrial powers such as West Germany, Japan, and Korea.

Germany had witnessed many economic troubles during the Weimar republic, saw the horrors of Nazism, but emerged as a role model for many nations after 1945, and rode on the back of a technological and consumer revolution. This however pales in comparison to the rise of Japan which modernized gradually since the Meiji restoration, and emerged as an economic powerhouse in diverse fields such as automobiles and electronics after the Second World War. However, Japan entered into a recession in the 1990's, and is plagued by problems such as ageing and low birth rates. The rise of Japan was followed by the rise of the Asian Tigers. China and India are seen as bright stars on the horizon, but these countries are plagued by their own set of problems. Thus, nations tend to rise and fall often on their own terms, and based on their own strengths or contradictions. The Phugoid cycle must be distinguished from business cycles such as recessions, which are short-term, and are based on economic inter-dependencies between nations.

There are many causes for the Phugoid cycle, but this paper only deals with the cultural and social factors behind the rise and fall of civilizations.

1. Cultural inflexibility and non-adaptability
2. Social and cultural stresses
3. Cultural lethargy and eventual laid back attitude of people
4. Over-confidence of leadership
5. Political decline and political bankruptcy
6. Cost incompetitiveness
7. Erosion of creative class

8. Shortage of skilled labour due to falling birth rates and other factors
9. Increased cost of labour not backed up by increase in quality
10. Loss of technological edge due to competition from elsewhere

Therefore, our approach can help identify Anthropological strengths, and present unique solutions to smoothen the Phugoid cycle. Example of solutions could be talent identification, reskilling, re-orientation of the education system, seeking out avenues of high-end employment, looking for new export markets, changes to taxation policy, embracing globalization where it is useful, looking for new avenues of internal consumption etc. While many nations may decline eventually, these approaches will help pre-empt scenarios of aborted Phugoid cycles, where growth stops before fulfilment of potential and self-actualization due to factors such as the labour cost- labour quality mismatch. <sup>59 60 61</sup>

### **Redefining ideas of taxation**

Taxation is a compulsory and non-penal transfer of wealth from individual or the private sector to the government to aid in revenue objectives and non-revenue objectives such as economic development. It is a compulsory financial charge or a levy imposed by a taxpayer who may be an individual or a legal entity, and the burden of tax falls on different entities at different pre-determined rates. It is also based on the concept of reciprocal rights and obligations between governments and its citizens. Failure to pay taxes is punishable by law. Most countries have tax systems in place to pay for public expenditure, day to day functioning of the government, or other national needs. In such countries, taxation is managed by specific government departments set up for this effect. Taxes were believed to be so certain, (and notoriously high), that Benjamin Franklin is once believed to have stated that the only two certainties in this world were death and taxation. However, in a few countries, known as tax havens, little or no tax is levied as a measure to boost investment. All kinds of fees charged by the government are not taxes, examples being tuition fees charged at government universities, and other forms of non-tax levies.

The first known system of taxation was in Ancient Egypt around 3000 BC to 2800 BC in the first dynasty of the Old Kingdom. In Ancient Egypt, forced labour was often extracted from the poor in lieu of tax. Other forms of taxes being levied in kind were also recorded in ancient societies. The Egyptian Pharaoh would often make tours of the kingdom, and collect taxes from the people. Taxation policies further evolved throughout the Greek civilization. Taxation is also described in the Bible in verse 33 of Chapter 47, and the rules of crop distribution besides other matters are also described in it. A regulated and sustainable tax system was also introduced by

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<sup>59</sup> The rise and fall of society: Frank Chodorow, The Devin-Adair Company, New York, 1959

<sup>60</sup> The rise and fall of nations: Ten rules of change in the post-crisis world, Ruchir Sharma, Penguin Books, 2017

<sup>61</sup> Why nations fail: The origin of power, prosperity, and poverty, Daron Acemoglu, James A Robinson

Darius I the great in 500 BC. The Manusmriti and Arthashastra also talk about taxation. It is also believed that the Rossetta stone of 196 BC represented a tax concession. From the Roman age, and throughout Medieval history, new forms of taxation were levied in property, inheritance and consumer goods. The Chinese T'ang and Song dynasties also employed censuses to track populations, and impose levies on them. From 1200 AD, the Mongol empire's taxation policies were designed to influence production of certain goods such as cotton. Taxation policies of Mughal rulers in India were also studied, and some of these such as the Jizya tax were religious in nature.

Taxation policies are choices made by a government as to what taxes to levy, in what amounts, and on whom. Taxation policy comprises both macroeconomic and microeconomic aspects. The macroeconomic aspects deal with overall quantity of taxes to collect, and a study of taxes in relation to economic activity. Microeconomic aspects of taxation include a study of the impact of taxation policies on individuals, and their indirect impact on economic activity. Some underlying principles are the Benefit principle which holds that individuals should be taxed in proportion to the benefits they receive from the government. The ability to pay principle states that individuals should be taxed based on their ability to pay. The equal distribution principle (which is contested) states that income, wealth and transactions should be charged at a fixed percentage.

These are also different underlying principles in taxation. Proportional tax is based on a fixed proportion of income or sales. A progressive tax is a tax imposed so that the effective tax rate increases as the amount on which it is based increases. Regressive tax is a mechanism where the tax rate decreases as the amount on which it is based increases. A lump sum tax is a tax levied as a fixed amount, and not a percentage. A threshold level is a level below which taxation is not imposed. The canons of taxation refer to the characteristics that a good tax system should possess. They may also refer to the rules and regulations which are taken into account while framing taxation policies. These however, do not fulfil our requirements completely, hence alternative approaches are proposed. The earliest canons of taxation were proposed by Adam Smith in 1776. Adam Smith's canons of taxation were

(i) Canon of equality of equity

The canon of equality states that the burden of taxation must be distributed equally or equitably among taxpayers. This is however seldom ideal because not all taxpayers have the same ability to pay taxes. Thus, the ability to pay, and 'fair share' must also be taken into consideration. In other words, the principle of justice assumes added importance here.

(j) Canon of certainty

The Canon of certainty states that a tax which an individual has to pay should be certain and not arbitrary. Thus, aspects such as the amount of tax, rate of tax, the base and the basis of levy should be made abundantly clear to the payer of taxes and the tax levying authority. It should also be sufficiently stable over a period.

(k) Canon of economy

This canon states that the cost of collecting a tax should be as low as possible. Any tax which involves high administrative cost and delay in assessment should be completely avoided. Thus, the revenue must be significantly higher than the cost of collection.

(l) Canon of convenience

Taxes should be levied and collected in such a way that it provides the greatest convenience both to the taxpayer and the government. Thus, the entire tax collection and administration process should be as trouble-free and transparent as possible, and all hassles and administrative difficulties should be removed.

In addition, more canons were proposed subsequently, examples of these being:

(a) Canon of productivity

According to Charles F. Bastable, taxes must be productive or cost-effective. Thus, revenue yield from a particular form of taxation must be significant. It must also not disincentivize people or act as a dampener to productive efforts of a nation.

(b) Canon of elasticity

The Canon of Elasticity is one of the important canons of taxation. This canon implies that a tax should be flexible or elastic in yield. The rate of taxation should be changeable based on exigencies. In case of emergencies, the tax rate must be changeable without any adverse consequences or difficulty in implementation.

(c) Canon of simplicity

Every tax must be simple and intelligible to the people so that the taxpayers are able to compute it easily on their own without employing a large number of consultants. Complex

tax systems may pose undesirable effects in the long-term, and such systems are even prone to misuse.

(d) Canon of diversity

The taxation structure must be diverse in nature and the revenue must be obtained from different kinds of taxes. Thus, the risk of depending only on one form of a tax must be understood.

(e) Canon of flexibility

The canon of flexibility states that the taxation system should be flexible in all respects. For example, the government should be able to increase or lower taxes based on its requirements or based on economic conditions. Such changes should be carried out easily without much difficulty.

Taxes are broadly classified into direct taxes and indirect taxes. According to Atkinson, "Direct taxes may be adjusted to the individual characteristics of the taxpayer, whereas indirect taxes are levied on transactions irrespective of the circumstances of the buyer or seller."

Taxes on income

- Income tax: Income taxes refer to taxes levied on individuals. Different countries charge income tax rates based on different criteria, and rates and computation mechanisms may vary. Some have threshold levels for exemption, while others follow telescopic rates that increase with income levels.
- Negative income tax: people below a certain level receive grants or supplemental pay from the government, often subject to terms and conditions.
- Capital gains tax: Capital gains tax is imposed at the time of sale of capital asset, and is based on the profit arising from sale of asset.
- Corporate tax: Corporate tax refers to the tax imposed on earnings or profits made by companies
- Social security contributions: Social security in many cases is publicly funded, and both employees and employers may be asked to make compulsory contributions. In some countries, governments may also directly contribute.
- Taxes on property: Property taxes may also be imposed on individuals. In some countries, a self-occupied property is exempt, and income arising from property is exempt upto a certain threshold. Property tax may also be imposed on the ad valorem value of the property.
- Inheritance tax: Inheritance tax, estate tax or death tax are taxes that arise at the time of the death of an individual. These may be taxed at the hands of the recipient.

- Consumption tax: Consumption tax is levied on consumption, often conspicuous consumption or luxury goods.

#### Taxes on goods and services

- Value added tax (goods and services tax): VAT is also known as GST or turnover tax in some countries. This is levied based on the value added by a manufacturer or an intermediary.
- Sales tax: Sales taxes are levied when a commodity is sold to a final consumer. These are often charged at different rates for different goods, and sales tax cannot often be charged on some categories of goods such as loose goods.
- Excise: Excise duties are imposed based on the quantity of goods sold, not the value. For example, in the USA, excise is levied on the basis of the quantity of gasoline sold.
- Import tax: Import tariff is the tariff charged by the importing country for movement of goods through a political border.
- Environmental tax: Environmental tax is a tax imposed on highly polluting industries. This has assumed added importance in the era of environmental consciousness.
- Pigovian taxes are taxes on goods with negative externalities. They may also include harmful and injurious goods.

#### Anthropological economics and taxation

While instituting taxation regimes, the following aspects must be borne in mind keeping in mind the principles of this paper.

For personal taxes, a progressive taxation regime may be instituted. While designing tax rates, culture specific factors must be taken into consideration such as the spending patterns of individuals (in that culture) for various income levels. This must include a study of spending patterns on essential and non-essential goods for various income levels in that culture. The marginal utility of money must also be taken into consideration for various income levels in that culture. A suitable threshold level for exemption must be arrived at after determining money spent on nutritional requirements, other essentials, education, health, and merit goods. High-income earning individuals may be taxed at a high-rate, as there will be very little control in determining the nature of expenditure of such individuals. However, suitable rebates may be provided to such high-income earning individuals if they make investments in industry, purchase government bonds, or invest in other sectors creating wealth or altering trickle down patterns of wealth suitably. For Wealth and Estate tax, the ability of individuals to pay and their total income, or wealth may be taken into consideration.

For determining corporate and business tax rates (and some other indirect taxes such as Sales tax, VAT, GST, excise etc) in various sectors, a Factor point model may be adopted. This will take into consideration both Anthropological and Non-Anthropological factors.

In Part A, (Anthropological factors) i.e. Number of end-consumers, number and type of intermediary consumers, types of consumers and their economic strata, number of employees working in the sector, types of employees and their economic strata, the number of upstream employees, types of upstream employees and their economic strata, whether the industry is capital intensive or labour intensive, the income elasticity of goods produced, the price elasticity of goods must be taken into consideration. The nature of goods, whether merit or non-merit goods, and whether reflecting conspicuous consumption or not will also be taken into consideration. In Part B, (Non-Anthropological factors), factors that may be considered include tax revenue potential, the growth potential of the sector, comparative advantage enjoyed, alignment with strategic national objectives, technological potential etc., must be taken into consideration. In case of import taxes and customs duties, tax rates may be derived indirectly based on the Anthropological and non-anthropological factors described above, and may be tailored to boost domestic production and conserve foreign exchange reserves to the extent possible without over-protecting it, or discouraging healthy competition. We recommend indirect taxes over direct taxes, though direct taxes may also be instituted with a suitable exemption limits and progressively higher rates for higher income groups (subject to investment patterns), and indirect tax rates must rise steeply for goods associated with conspicuous consumption *ceteris paribus*, and other factors must also be considered.

### **As a guide to public expenditure**

Many theories have been proposed as a guide for public expenditure, and we present a few of these below:

According to Adam Smith, the sovereign has only three duties to attend to: first, the duty of protecting the society from the violence and invasion of other independent societies. Secondly, the administration of justice, thirdly the duty of erecting and maintaining public works. Thus, Public expenditure could be classified into protective functions, commercial functions, and developmental functions. Adolph Wagner presented his law in increase of state activities which stated that increases often takes place in the frequency and intensity of state interventions. This increase could be both intensive and extensive; both national and local governments constantly understate new functions, while at the same time improving the functioning of existing projects and schemes. Musgrave advocated public expenditure such as activities to secure a reallocation of resources, redistributive activities, stabilizing activities and commercial activities. Thus, public expenditure should be increased in different kinds of economies.



According to Prof Shirras, public expenditure should balance income, and not necessarily seek a profit

There are many similarities between public and private expenditure. For example, both parties seek to maximize a return on investment and do not spend money on expenses which do not yield any benefit. Thus maximum possible outcome is sought to be achieved with minimum expenditure. Public authorities however, generally bear the interests of the entire economy in mind. Private enterprises also boost the economy through their expenditure. However, they are guided largely by self-interest. The government is also in a position to raise large sums of money for the benefit of the country much more easily than private individuals.

According to Prof. Shirras, the 'classification of Public expenditure' is very important. Thus, the relative expenditure allocated to different heads is the criterion of good investment.

Cohn and Piehn have classified the public expenditure on the basis of benefit into the following classes. However, in real life classification of expenditure into these heads is far from easy:

1. Public expenditure benefitting certain people – this is not a common benefit, e.g. poor relief
2. Public expenditure benefitting certain people and the entire community as well, e.g. the administration of justice
3. Expenditure that benefits particular groups. E.g., subsidies granted to specific industries.

Nicholson classified expenditure into the following categories

1. Expenditure without a direct return on revenue - poor relief, expenditure on wars
2. Expenditure without direct return, with indirect benefit to revenue. E.g. education
3. Expenditure with partial direct return. E.g. for which fees are charged, subsidized railway service.
4. Expenditure with full return or even profit. E.g. post office, gas service

Mill classified public expenditure into two classes, optional and obligatory or necessary. However, the two may often be hard to distinguish, according to Mill, it is very hard to distinguish between the two, and optional requirements may often be driven by compulsions. Roscher classified public expenditure into necessary useful, and superfluous or ornamental. Necessary expenditure is the expenditure which the state has to incur, and which cannot be postponed. Useful expenditure is that which is desirable, but can be postponed. Superfluous expenditure is one which the state may or may not incur. Findlay Shirras classified public expenditure on the basis of primary and secondary functions of the government. Primary expenditure is all expenditure which governments are obliged to undertake, for example defence, law and order, and the payment of debts. Secondary expenditure includes

expenditure such as social expenditure, education, public health, poor relief, unemployment insurance, famine relief etc. Dalton classified public expenditure into two categories 'grant and purchase price'. When the state incurs an expenditure and gets in return some service or community, the expenditure is called a purchase price, but when the government does not get anything in return, it is called a grant. Dalton distinguished between direct grants and indirect grants. A grant may be direct, if the benefit accrues to the person to whom it is made. It is said to be indirect, if it partly passes on to some other person besides the person to whom it is made. Professor Pigou also tried to classify expenditure, and according to him, expenditure of money by government authorities could be separated into two heads, expenditure that purchases current services, or productive resources for the use of these authorities, and expenditure on exiting property rights to private person's. The former includes expenditure on the payment on interest of government debt, pensions, sickness benefit s etc. it also subsidizes on the production of particular kinds of commodities such as sugar, milk, meat of houses etc. He also refers to the two categories of expenditure and transfer expenditure and non-transfer expenditure. Prof JK Mehta classified public expenditure into two categories – constant expenditure and variable expenditure . Constant expenditure is expenditure which does not depend on the extent of use by the people, in whose interest it is incurred. An example of this kind of expenditure is defence. On the other hand, variable expenditure increases with every increase in the use of public services. An example of this kind of expenditure is postal services.

In the early days of Economics, there were very few theories of public expenditure. However, with the rise of the welfare state, attention was paid for the first time to formulating theories of public expenditure. Theories of public expenditure can be divided into (a) Pure theories of Public expenditure (b) General theories of public expenditure

The following are the pure theories of public expenditure

Pigou's ability to pay theory is one of the more prominent theory of Public expenditure. Pigou provided one of the most comprehensive theories of public expenditure. According to Pigou's ability to pay theory goods and services which are provided by government departments can be sold for fees that cover the cost of production. But fees cannot cover other expenditures of government such as defense and administration costs. According to Pigou,

- (1) The greater the aggregate income of the community, the large the optimum amount of expenditure will be
- (2) Government expenditure will also depend on the ability of the private sector to marshall resources
- (3) Government expenditure will also be determined by the disparities of wealth in society.

Erik Lindahl, Johansen and Bowen, Samuleson and Musgrave have presented various versions of the benefit principle, which states that benefit should be a basis of expenditure.

In the Voluntary Exchange theory of Lindahl, the revenue-expenditure process, as a phenomenon of economic-value and price is arrived at as a three-fold decision. (1) Before determining the relative distribution of tax shares between various taxpayers, a choice must be made between the satisfaction of alternative wants by private households. Let us suppose a given sum is to be raised from the taxpayers A and B jointly. Now, if B pays a larger share of the total tax, A's curtailment of his own private outlays will be smaller (that is, A pays less tax) and vice versa. (2) A second choice is now required it is between the satisfactions of alternative wants in the public sector. If more money is spent on defence, less is available for education. In order to determine the total revenue to be collected and spent, a third choice is to be made between the satisfaction of public wants and private wants.

Samuelson's pure theory of public expenditure goes back to Italian, Australian writers who are responsible for the renaissance of the benefit approach. They were concerned with efficient resource allocation. One of the bases of this theory is that public goods can be provided by the government alone, and these are not dependant on private preferences or market mechanisms.

#### General theories of Public expenditure

The following are the general theories of public expenditure:

Adolph Wagner was a famous German fiscal theorist who believed there had to be a close relationship between the growth of the economy and the relative growth of the public sector. He presented his famous 'Law of the increase of state activities', he stated that "Increase regularly takes place in the activities of national and local governments. This increase may be both extensive and intensive, as states constantly undertake new functions. Public sector expenditure also grows as a function of total state activity. Thus, public sector expenditure may be expenditure for external and internal security, culture and welfare including health, transport, education, banking etc." Thus, public expenditure was also important for industrializing economies, and there had to be a continuous expansion of social activity for growth. Wagner's hypothesis was supported by FS Nitti, but was criticized by Allan Peacock, Jack Wiseman and others.

Another hypothesis on public expenditure was proposed by Allan Peacock and Jack Wiseman based on a study of public expenditure in Great Britain between 1890 and 1955. According to this hypothesis, increase in public expenditure does not follow any smooth and continuous trend but increases in a step like manner or jerks. Social disturbances lead to increased public expenditure. This hypothesis is classified into the Displacement effect, the Inspection effect,

and the Concentration effect. As per the displacement effect, previous lower taxes and expenditure are replaced by higher levels. As per the Inspection effect, solutions to problems are often found during war and other crises. As per the concentration effect, there is a tendency for expenditure of national governments to grow faster than that of state governments.

As per the Colin Clark hypothesis, also known as the Critical limit hypothesis, when the government's share of aggregate economic activity reaches twenty-five percent, people produce less, since incentives are harmed by the fact that increasing income must be paid back to the government in the form of taxes. On the other hand, money in the hands of the people expands demand, and leads to economic growth. This idea was welcomed by some industry leaders, but was criticised in academic circles due to its arbitrary figure of twenty-five percent.

The following is the criteria on which public expenditure is based:

#### Growth maximization criteria

Different criteria for investment have been suggested for different projects. The entire objective is to maximize growth. The growth must however be equitable, and the benefits must reach the poor. In a vast majority of cases, however, the benefits of public expenditure do not reach the poor early, and the gestation period of most projects is high.

#### Capital output ratio criterion

Here, the output achieved with respect to the capital employed as well as incremental output with respect to incremental capital employed is the criteria for public investment. This can be determined at the overall level of the economy or at a sector wise level. This concept however assumes a simple and a linear relationship between capital and output which may always not be the case. Such a ratio may also not fail to consider additional benefits arising to the economy which are outside the project.

#### National product test criterion

National product or consumption test criterion was proposed by J. Timbergen to measure direct and indirect consequences of a project based on accounting prices or shadow process. A shadow process approximates the real value of the marginal cost of supplying the value or the service. Timbergen, however distinguishes between the direct and indirect effects of the project. Direct effects are those to be expected in the absence of further changes in total national income, while secondary or indirect effects consist of the changes in productions which are consequences of changes in national income.

#### Social marginal productivity criterion

Social Marginal Productivity criterion was proposed by AE Khan, and refined by HB Chenery who attempted to quantify it in empirical terms. According to him, efficient allocation is one which maximizes the value of national product, and the rule for achieving this is to allocate resources in such a way that the Social Marginal Productivity of capital is equal in different uses.

#### Reinvestment criterion

Leibenstein thinks that the rule of social marginal productivity requires the developing countries to choose those industries that require comparatively lower capital labour ratio. However, this may not naturally lead to higher growth. However, maximization of GDP may not be the sole yardstick always, as different factors come into play.

#### Employment absorption criterion

Eckstein is however, more inclined to maximize employment with low capital turnover ratio, and high labour intensive technology rather than on reinvestment criterion. This would suit the needs of developing economies, but would lead to a vicious cycle of low productivity.

#### Balance of payments criterion

Balance of payment criterion comes into play because foreign exchange is a scarce commodity, and efforts must always be made to conserve it. Efforts may be made to encourage export oriented industries, and opt for import substitution.

#### Time series criterion

Professor AK Sen has suggested a time series criterion for public investment. This approach tries to seek a maximum possible output for a given period of time through a proper balance of labour intensive and capital intensive methods. Thus, it can be decided which combination of the two leads to a maximum return within a particular time horizon.

However, from our perspective, these approaches miss the Anthropological bus completely. Hence, the various techniques proposed in our paper such as a trickle down analysis, anthropological accounting, anthropological economic double accounting, and computation of anthropological rate of return on investment would come in handy to evaluate public expenditure, and public expenditure patterns must vary widely from context to context. Expenditure on health, welfare and education would therefore score high in our scheme of things and would be associated with a major multiplier effect.

#### **Design of Financial products**

Design of financial products which may include a wide variety of products such as loan products, savings products, and retirement products, is extremely difficult and tricky as customers evaluate financial products on the basis on a large number of parameters, and often engage in a complex process of trade-offs. Customers may look for liquidity, flexibility, security, growth, convenience, a combination of these, and may attach different mental weights to different aspects of a product. Thus, preferences may vary widely from customer to customer, and more widely from culture to culture. Thus, preferences would vary not only based on cultural attributes such as risk-taking and orientation in life, but would also be dependent on the cultural and social environment which may encompass traditional investment patterns, family support systems, social cohesion, governmental support systems, presence or absence of other financial products to name a few. Even though potentially useful products like job insurance and reverse mortgage are lacking in many countries, there is a tendency to adopt a one-size-fits-all approach in the design of financial products, and cultural differences are seldom taken into consideration. Moreover, the use of ethnography, fieldwork and surveys to help design different products in different contexts, is virtually absent. Another serious drawback is that most financial products are targeted towards the wealthy, and there is very little effort to make financial products designed for the poor, work. According to Collins et al, poor people face the “triple whammy”: to begin with, their incomes are low, and they are also unpredictable, and thirdly, because they are financially excluded from society, poor people lack the financial instruments to help them manage what little, irregular income they have. Companies and institutions do not deem it worthy to design products to suit the needs of this class of investors, and the systematic design of financial products for this sector is virtually non-existent, as fears of poor adoption and default remain. Some products like the Grameen Pension Services do exist, but are not well-entrenched in society, or information widely disseminated.<sup>62 63</sup>

### **Design of Social security systems**

The realization of the importance of social security is growing among thinkers, economists and planners worldwide. The design and implementation of early social security systems was one of the hallmarks of twentieth century. However, the move towards more sophisticated social security systems must become a 21<sup>st</sup> Century revolution, and this feature will greatly help differentiate “civilized societies” from “less civilized societies.” The day is not probably not far off when social security systems are as central to societies as health and education. In many developing countries, social security systems are non-existent or are still undergoing construction; while in others such as the former socialist States, these systems are being

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<sup>62</sup> Designing savings and loan products, Graham AN Wright, February 2010

<sup>63</sup> FINANCIAL PRODUCT DEVELOPMENT. STANDARDS AND PRACTICES, Report prepared by Joint Forum Product Disclosure and Regulation Committee, April 2013

completely restructured to meet the needs to the Post-Soviet era. However, conceptualization and execution of ideal social security systems will remain a major challenge for several decades to come, as there is barely any consensus on the definition of an ideal social security system yet.

As defined by the International Social Security Organization, Social security is as “A programme of social protection established by legislation, or any other mandatory arrangement, that provides individuals with a degree of income security when faced with the contingencies of old age, survivorship, incapacity, disability, unemployment, or rearing children. It may also offer access to curative and preventive medical care and may include social insurance programs, social assistance programs, universal programs, mutual benefit schemes, national provident funds, and other arrangements, including market-oriented approaches. This definition is relatively all-encompassing, and tallies with other definitions in the field.

Social security has a relatively short but chequered history. Germany became the first nation in the world to adopt an old-age social insurance program in 1889, and it was designed by Otto von Bismarck. Among the earliest references to a welfare state in the UK was made in 1832 by “The Royal Commission into the operation of poor laws”. Early activists for government support in the UK included Seebohm Rowntree and Charles Booth, and these sociologists opposed the old view, then fashionable among the elite, that the poor were responsible for their own plight. Many steps were taken towards a welfare state in the UK between 1906 and 1914 by the Liberal Party, and the minimum wage was introduced in 1909. Free school meals were provided in the UK since 1906, and old age pensions were introduced in 1908. The role of the state further increased after WWI, and during the Second World War, free rations were often provided. The Labour party introduced a series of new laws in the 1940’s, and these included the National Assistance Act of 1948, National Insurance Act of 1946, and the National Insurance (Industrial Injuries) Act of 1946.

The Social Security signed into law by Franklin D. Roosevelt in the USA in 1935, created a social security net for the elderly, unemployed and the disadvantaged. However, the idea of a monthly stipend for the elderly was first proposed in the USA by Dudley J. Leblanc in 1932. Title II of the original Social Security Act of 1935 established a national plan designed to provide economic security for the nation’s workers. The system of Old-Age Insurance it created provided benefits to individuals who were aged 65 or older and who had “earned” retirement benefits through work in jobs covered by the system. The Social Security Amendments of 1939 shifted the emphasis of Social Security from protection of the individual worker to protection of the family by extending monthly cash benefits to the dependents and survivors of workers. During the subsequent decades, changes were made to the Social Security program to expand it in many ways, and achieve near-universal coverage. In the early 1970’s, Richard Nixon

attempted to introduce Universal Basic Income in the USA, though unsuccessfully. Social security systems are nascent in developing countries though some countries like Iran have initiated unconditional cash transfers, and many others are trying out pilot projects with mixed results.

The following are the different types of social security or welfare programs that are widely known:

- Cash assistance and cash transfer: Per this approach, money is transferred to the accounts of the needy under specific conditions
- Universal Basic Income: This is a kind of unconditional money transfer program, though not widely implemented yet
- Nutrition assistance program: Examples of this kind of programs are food stamps and ration card programs
- Temporary assistance for needy families; Assistance is provided to poor families in time of need
- Earned income tax credit: Provides a subsidy to the wages of qualified low-income individuals
- Supplemental security income: Provides cash grants to the aged, blind and disabled
- Medicaid: Provides specified medical services to the poor free of cost
- Land distribution: Agricultural or other land is distributed to the poor subject to conditions
- Public housing : Either free or subsidized housing may be provided to the poor
- Free education: Either free or subsidized education may be provided to the poor
- Education support: Education support in the form of free meals or loan assistance, may be provided to the poor
- Old age security: A minimum level of old age pensions may be provided to the poor, and individuals may also contribute to their own pensions
- Supplemental security income: This is provided to the disabled and the sick, for example, and specific beneficiaries.
- Unemployment insurance: Provides insurance for a limited period for unemployed people
- Minimum assets program: As per this approach, a minimum level of assets are provided to the poor and the needy
- Disability benefits: Special programs are introduced for the disabled
- Maternity and childcare benefits are provided to eligible people
- Skilling programs: Vocational training is provided to the poor, and skill gaps are thereby bridged.



## Principles of social security

We can therefore propose some basic principles of social security at this stage:

1. Social security is primarily provided on humanitarian grounds to eligible beneficiaries
2. The list of eligible beneficiaries must be carefully thought through to prevent misuse
3. The amounts paid must also be carefully considered to prevent misuse
4. The total benefits made available to an individual or a set of individuals must also be taken into consideration while carrying out an assessment
5. Social security cannot be a substitute for empowerment of able individuals, and such schemes should demotivate able individuals
6. The efficacy of Social Security schemes must be evaluated in a cultural context, though best of breed approaches can be adopted
7. Our theories on motivation must be taken into consideration while designing Social Security systems. For, example the proposed NYAY scheme or UBI scheme for India (Rs 6000 PM) may actually disincentivize individuals from working, lead to cost-push inflation, create an artificial labour shortage, induce secondary poverty, negatively impact the agricultural and industrial sectors, and lead to different kinds of disequilibriums in the economy.
8. Ideal Social Security systems enhance human health, happiness and wealth in the long-term
9. Social security systems design must be based on thorough fieldwork
10. Social security systems must ideally be formulated on a need basis
11. The gamut of human experience, deprivation, destitution and misery must be taken into consideration before formulating any scheme
12. Social security also needs to be understood as a mindset, and a feeling of confidence, and this data needs to be considered in the planning process
13. Social security must as far as possible be used for coverage of essential expenditure only
14. Mode of payment must not lead to misuse or inappropriate utilization e.g. cash payments must be avoided wherever possible
15. Social security systems may be divided into 'Capital and revenue', and ideally, Capital Social Security must be preferred in our view to promote long-term well-being. Examples of Capital social security could include transfer of productive assets such as land, or subsidized housing.
16. Misuse of social security systems must be monitored continuously and must be factored into design.
17. Social security systems must be designed in such a way that the maximize short-term and long-term motivation and satisfaction
18. Social security systems must be based on the principles of equity and justice
19. Social security systems must follow the human lifecycle approach
20. Must follow the individual requirements approach as far as possible

## 21. Theory of convenience

- Availability of Social Security where it is required: E.g. The one nation, one ration card system proposed in India
- Availability of Social Security when it is required: E.g. Special package for financial emergencies, withdrawing pending amounts in an account in case of financial emergencies

22. Special packages can be paid for macro-economic crises, E.g. COVID-19

23. Social security can be used as a tool to reduce economic fluctuations by enhancing payouts to boost purchasing power in the time of a recession

24. Event-dependant social security measures can be deployed to boost economic goals. E.g. mothers who educate their children can be paid more social security

25. Innovative schemes can be encouraged. E.g. carrying forward unutilized food stamps partially to boost employment

## Understanding Language dynamics and helping prescribe language policy

Language dynamics is an exciting new field of study with many implications for policy and economic planning. Many important research institutions around the world have now begun to study language dynamics with the attention it demands, even though the field is still in its infancy. Among these are the Social Dynamics Lab, which is headed by Vittorio Loreto, a Full Professor of Physics of Complex Systems at Sapienza University of Rome and Faculty of the Complexity Science Hub Vienna. Another school of study is the School of Advanced Study of the Open World Research Initiative (OWRI) by the University of Manchester. It explores the role that languages play in relation to key contemporary issues such as social cohesion, migration, health, business and diplomacy. Another institute worth noting is the Australia-based ARC Centre of Excellence for the Dynamics of Language which is currently headed by Professor Nicholas Evans. We have discussed the underlying concepts behind the science of language dynamics in three different papers with dealt with language dynamics in multi-lingual societies, the origin of language, and the principles of language spread. However, the hands of a linguist are almost always tied, given that language dynamics are often determined by other factors such as political factors and economic factors as well. <sup>64 65 66 67 68</sup>

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<sup>64</sup> Towards a comprehensive compendium of factors impacting language dynamics in post-globalized scenarios: Presenting principles, paradigms and frameworks for use in the emerging science of language dynamics, Sujay Rao Mandavilli, ELK Asia Pacific Journal of Social Sciences Volume 6, Issue 3 (April –June 2020)

<sup>65</sup> Observations on language spread in multi-lingual societies: Lessons learnt from a study of Ancient and Modern India, Sujay Rao Mandavilli, ELK Asia Pacific Journal of Social Sciences, 2015

<sup>66</sup> On the origin and spread of languages: Propositioning Twenty-first century axioms on the evolution and spread of languages with concomitant views on language dynamics, Sujay Rao Mandavilli, ELK Asia Pacific Journal of Social Science Volume 3, Number 1 (2016)

<sup>67</sup> General Linguistics, RH Robins, Taylor and Francis, 1989

The linguist can therefore make several important recommendations to ensure that linguistic skills are maximized, and the language acquisition process is made as smooth and hurdle-free as possible. Solutions could include one or more of the following:

1. Using language dynamics as a basis for language planning and syllabus formulation
2. Identifying economic activities that call for a high degree of linguistic skills.
3. Identifying economic activities that call for a lower degree of linguistic skills.
4. Segmenting populations based on linguistic proficiency, and mapping them to socio-cultural and socio-economic classes.
5. Introducing the dominant language in schools along with the mother tongue from an early age.
6. Optimization and prioritization of vocabulary learnt, and leaving out unnecessary content.
7. Leaving out non-essentials such as poetry and literature.
8. Encouraging relexification and borrowing of words from dominant or more vocabulary rich wherever possible: there is no need to reinvent the wheel. This approach was implemented in Malaysia and Indonesia.
9. Identifying words based on their common usage, and imparting instruction in language accordingly.
10. Bilingual textbooks wherever possible
11. Script merger to speed up the language acquisition process. This approach was implemented in Malaysia and Indonesia and the old, cumbersome Jawi script was discarded.
12. Transferable skills approach: Importance given to mother tongue at an early age, and to the more dominant or more useful language in later years.
13. Switch to dominant language as a medium of instruction from an early age.
14. Choice regarding medium of instruction left to parents.
15. Use of technology to bridge the gap between 'linguistic haves' and 'linguistic have-nots'.
16. Teacher training
17. Use of appropriate pedagogical techniques and instructional aids
18. Mandating multilingual use in public life wherever possible

Even though language policy, language teaching and pedagogical techniques hold a great deal of promise, the field is marred by dogma, apathy, ignorance and complacency in countries such as India, leading to precious human potential being potentially frittered away. It would be instructive to observe how changes manifest themselves in the decades to come, but the onus would be on Anthropologists and Economists to make this happen.

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<sup>68</sup> The origin and evolution of language, Brian Stross, University of Texas, W M C Brown Company, 1976

## **Culture and consumption patterns**

Culture greatly shapes people's buying preferences; purchase decisions are affected by whether their decisions are based on group or individual decisions, and their choices and emotions affect market choices. Thus preferences for shape, size and colour are determined by culture, as also the quantum of purchases, revaluation processes, brand loyalties, and risk taking behaviour. Thus, there are many lessons to be learnt from the world of marketing and corporate strategy, but culture has largely been ignored by Economics perhaps because it has largely remained euro-centric in orientation; Thus, vested interests and conflicts of interest keep it from globalizing unlike research in marketing which was used to boost the interests of Western-based MNC's.

Cultural literacy may be as important to economists as it is to marketers. For example, shortly after Apple's 3GS iPhone was introduced to the Japanese market, the product topped the bestselling list of smart phones in Japan. But just five years earlier, Nokia's dual mode phone failed in Japan. Nokia's failure is attributable to its lack of its recognition of the fact that Japanese handset users valued mobile Internet even then. Culture can impact human behaviour in many ways. First, culture can mould preferences and decisions making patterns. A Chinese consumer often buys a cup of coffee that sells at 28 yuan more than an identical cup of coffee from the same coffee shop that sells at 24 yuan, because 4 is an unlucky number and 8 is a lucky number in Chinese culture, just as number thirteen is unlucky in the west. The Ford Edsel of 1957-59 was an expensive failure even in the domestic American market because its designers chose not to listen to consumer feedback and imposed their own ideas instead throughout the design process. Many years ago, the name of the General Motors car Chevrolet Nova had to be changed in some markets, because the word meant "won't go" in Spanish. Ready made foods were once frowned upon in South America, because they were seen as being at odds with family values. Most western fast food chains do not sell beef in Indian outlets, just as serving pork in Islamic countries is taboo. In the western Indian state of Gujarat, meat is most often not served at all, and halal and kosher foods are mandatory in some markets. Thus, often local legislation examples being restrictions on the advertising for tobacco products, and alcohol also need to be taken into consideration.

Since the late 1990s, globalization has received a considerable boost due to the collapse of the erstwhile USSR, and the rise of the internet economy, and is defined as a process where culture and behavioural patterns tend to merge due to shared influences and cross-border sharing and percolation of values. On the other hand, glocalization is the process of adopting global products for different local markets, and this process must always take local cultural attributes into consideration to connect better with local consumers and respect their values and preferences.

Thus, the demand curve for colas in USA and India is likely to vary widely because in the USA coke is viewed as an intrinsic part of American culture, but not so with Indian culture. Everything changes in due course, however, consumption of colas are now high in India as well. An interesting case is that of “Thums Up” (Now owned by the Coca Cola Company) which is a coke with Indian flavours. Outside India however, the demand for this coke is extremely small, as brand awareness is non-existent, and is associated with Indian culture. Demand curves for pastas in Italy and India likewise vary widely, and the variety of pastas on offer in India is very small. In Italy, pasta represents a culture good, while in India it represents a non-culture good. Demand curves for noodles in China and India likewise vary, and in this case, the idea of noodles has become partly internationalized. However, the brands, packaging and flavours vary very widely from region to region, and in many contexts, they represent exotic, non-culture goods. Even though goods may be made widely available, there must be a demand for it in a given situation and context, and this would be widely dependant on culture. We may also propose a hierarchy of products based on the rates of internalization. Thus, cigarettes and cokes may be internalized faster than exotic cuisine, and this would depend on the process of cultural symbiosis, a process that we revealed in great detail. Thus, the consumption function, the demand elasticity curves and the income elasticity curves would not only vary widely from culture to culture but also change with time. Many other factors besides tastes, habits and preference tend to influence customer behaviour. For example, individual in some cultures tend to save aggressively and spend cautiously. The ideas of Behavioural Economics must also extended to culture-specific studies, and differences in behavioural aberrations noted. In some other cultures, conspicuous consumption is frowned upon. The demand for Inferior goods is relatively inelastic in most cases. Inferior goods also provide a semblance of economic stability during economic downturns, but beyond a certain point, an economy may be averse to producing inferior goods due to cultural and economic alienation. It may also be necessary to understand the level of maturity, complexity and diversity of an economy here, and how open it is to other cultures, and how receptive it is to external ideas. This approach would have many other downstream uses, such as the preparation of Production possibility curves, and Production possibility frontiers, and anthropological basis for economic forecasting.

### **Birth rate Economics**

The term ‘demography’ refers to the systematic study of population. The term is of Greek origin and is comprised of the words, ‘demos’ which means people and ‘graphein’ which means to describe. Demography studies the trends and processes associated with population including changes in population size; changes in sizes of social and cultural sub-groups, patterns of births, deaths, and inward and outward migration patterns; and the structure and composition of the population, such as the proportions of women, men and different age groups besides metrics

such as total fertility rate, maternal mortality rate, and infant mortality rate. Demography which played a major role in the formation of the social sciences includes formal demography which is a quantitative field, and social demography which focuses on the social, economic or political aspects of populations. All demographic studies are based on processes of counting, surveys, censuses or enumeration – such as the census or the survey – which involve the systematic collection of data on the people residing within a specified territory.

The world population grew very slowly for millennia. The world population in the third million BC may have only been a couple of tens of millions. The first billion was reached in only 1804, the second billion in 1927, the third in 1960 etc. The rapid growth rates were due to a demographic transition, and most of the growth came from developing countries. The estimated current world population as of 2020 is 7.8 billion. Birth rates are now falling rapidly everywhere, and the world population is expected to stabilize by 2050 at 10 billion.

One of the most notable theories of demography was proposed by the English political economist Thomas Robert Malthus. Malthus's theory of population growth, as outlined in his "Essay on Population" published in 1798 envisaged a pessimistic scenario. He argued that human populations would grow at a much faster rate than agricultural production, and that this would lead to mass starvations. He argues that while population increases in a geometric progression, agricultural production only grows in arithmetic progression. Because population growth always outstrips growth in production of subsistence resources, the only way to increase prosperity is by controlling the growth of population.

Another theory is the theory of demographic transition. In the first phase, birth and death rates are very high reflective traditional cultural patterns and the absence of modern science or medicine. This leads to extremely low population growth. In the second phase, death rates decline due to better health practices and increased nutrition without a corresponding decline in birth rates; this leads to rapid population increases. However, birth rates fall in due course, and population growth rate falls. This is known as the third phase of demographic transition. This theory has been amply borne out by real-world experience, and different countries are in different stages of the demographic transition.

Many co-relations have been proposed between population growth and economic development both optimistic and pessimistic. Thomas Malthus and other modern thinkers such as Paul Ehrlich who, in his "The population bomb", of 1968, predicted that within a decade, overpopulation will cause repeated famines and resurgence of diseases, eventually killing one fifth of the world's population, reflect a pessimistic view, while an optimistic view has been advocated by economists and demographers such as Julian Simon, Simon Kuznets and Esther Boserup. Real world linkages between population and economic growth patterns are much

more complex. Factors that need to be borne in mind before commencing any such assessment include the age structure of the population, cultural composition, composition of educational attainments, increase or decrease in the quality of human resources, dependency ratios, median age in the population, changes to all these factors over a period etc. High population growth rates may economic boost growth rates, and increase a country's soft and hard power. On the other hand, they may lead to over-population, deplete natural resources, and lead to high unemployment. Low birth rates may be desirable from an environmental view, but cause labour shortage, and are associated with cultural and economic decline. Most advocate an ideal total fertility rate such as 1.7 to 2 children per women, while some, known as pro-natalists, recommend higher birth rates. Thus, population growth rates, and the economic future of a nation are co-related in complex ways. Those who argue for higher birth rates claim that humans are geniuses and innovators, and can help society in many ways by provided talented labour. As Mahatma Gandhi famously said, "Each mouth comes with two hands."

Others argue that smaller populations can produce an equal number of geniuses, provided the education system is tweaked. We uphold this idea as well. (Simon 1977) (Kuznets 1960) a minority of scholars such as Easter Boserup argue that pressure of natural resources due to population growth creates innovative solutions, but this must be counter-balanced with other factors as well. (Boserup 1981)

Therefore, while much attention has been focussed in the cultural basis of population growth, more research may need to be carried out on the short-term and long-term economic implications of various TFR levels. Economists may recommend the ideal TFR levels in different contexts, also taking into account natural resources and other factors, and may help assess the need for, and intensity of birth control measures. A dimensional and slice and dice analysis in a multi-cultural society can throw up many vital insights, and a population growth rate scenario driven economic modelling is another potentially useful tool.

### **Subsidy management**

A subsidy may be described as a payment, made directly or indirectly, to an individual or business entity, often in relation to another transaction, to lessen the financial burden thereof. Oxford Online Dictionary where a subsidy is defined as: "a sum of money granted from public funds to help an industry or business keep the price of a commodity or service low". A subsidy may support specific individuals or specific sectors of a nation's economy. It may assist struggling industries by lowering their burdens, reduce the cost of capital expenditure, or encourage new developments by providing financial support for promoters.

Direct subsidies are those that involve an actual payment of money to an individual, group or industry. On the other hand, indirect subsidies do not involve actual cash outlays. They can include aspects such as discounts on prices for specific productive capital goods or services that are government-supported, enabling them to be purchased at a discounted rate. This may boost some kinds of economic activity. From our perspective, recipients of subsidies must be properly identified, and such subsidies must lead to both a high anthropological and an economic rate of return. Thus, subsidies must be ideally given on specific goods such as the purchase of agricultural inputs, and productive capital assets. In other words, subsidies must be linked to economic growth.

### **Anthropological Economics and plans for different sectors: The case of tourism**

Culture can also be used as a basis of planning and a fundamental differentiator in a wide variety of industries. We take the case of tourism because of its cultural foundations and differences in preferences and perceptions across the globe. Furthermore, attempts have already been made to interface it with Anthropology, and rites de passage studies (E.g. Peter M. Burns who studied the desire of Australians and New Zealanders to travel to Europe). Even though it is classified as an industry, tourism is a part of the services sector, and many of the services provided under this sector are intangible. (Howell 1983) It may also encompass other service oriented products such as packaged foods, and hotel chains. The first anthropological study of tourism was undertaken by Nunez in 1963, and later by Cohen in the 1970's and Graburn in the 1980's. Przeclawski proposes an inter-disciplinary approach to the study of tourism which includes a thorough study of its economic aspects (supply, demand, business, markets etc), as well as social, cultural and psychological aspects.

Tourism is a major source of revenue for governments throughout the world. Millions of livelihoods depend on it directly or indirectly, and it is closely interlinked with other sectors such as the hospitality sector. There are many types of tourism such as religious tourism, beach tourism, hill resort tourism, industrial tourism etc. Many economies as diverse, and far apart such as Switzerland, South Africa, and Australia, depend heavily on tourism. For example, tourism is the pulse of Kashmir, and the major source of employment for many people there just as Hajj is one of the lifelines of Saudi Arabia's economy. Sophisticated models are therefore being developed to assess the impact of tourism on the economy, including its downstream and multiplier effects. Yet, the tourism sector was neglected as recently as the 1980's, and major attempts are yet to be made to give it a cultural orientation to leverage its full potential. At the other extreme, the Chief Minister of Andhra Pradesh, Chandrababu Naidu spoke about riverfront tourism in Amaravathi, the proposed capital of Andhra Pradesh, an unworkable concept due to cultural differences between India and the west. However, there is a vast untapped potential for other kinds of tourism in India, and the potential can be assessed



against a backdrop of cultural change. Therefore, tourism is associated with latent or unmet demand. (Smith 1989) A definition of the demand for tourism was provided by Johnson and Thomas {1992}. According to them, demand for tourism comprises of three elements, which include the demand of those already travelling but may wish to spend more, those who wish to travel but are currently not travelling, and those who do not wish to travel, but can be coaxed into doing so. In this case, major demand shifter would be cultural preferences, as major determinants of travel and tourism are cultural.

Another aspect is that of 'Cultural Heritage', which connects people with their past, and provides a sense of identity. Cultural heritage sites have aesthetic, religious and economic implications and their value is brought out through a valorizing process before their economic outcomes can be assessed. As per a definition provided by UNWTO, these can include arts, festivals, cultural events, etc, and can be a major source of employment to locals, and a foreign exchange earner as well.

### **Disaster Management**

Disasters have been known since time immemorial, and are attested in Ancient Egypt, the Indus Valley Civilization, and the Gangetic plains (Lal 1955). In modern times, major disasters affect countries as diverse and far apart as the USA and Bangladesh. The Indian Disaster Management Act, 2005 defines disaster as "Disaster means a catastrophe, mishap, calamity, or grave occurrence in any area, arising from natural or man-made causes or by accident or negligence which results in substantial loss to life or human suffering or damage to and destruction of property or damage to and the degradation of the environment and is of such nature and magnitude as to be beyond the coping capacity of the community of the affected area." From a purely economic perspective, disaster recovery would take into consideration factors such as relief, response, rehabilitation, and reconstruction, and the objective of such an approach would be to ensure that there is minimal economic disruption, and economic disruption is brought back under control as quickly as possible. Disasters can affect a variety of sectors such as agriculture, manufacturing, services, and tourism. Disasters also have a psychological impact, and can badly damage people's morale. Effects of disasters can therefore be categorized into direct effects, and indirect effects. (Lindell and Prater 2003) The former would include losses directly attributable to the disaster, while indirect effects would include secondary losses, such as loss of morale, and production, consumption and output losses. An Anthropological Economist would therefore assist in the preparation of economic recovery plan, but also take cultural factors into consideration, and balance the anthropological impact with sound economics, and an understanding of short-term, medium-term and long-term economic impact. An Anthropological Economist would also need to take into consideration the resilience

and coping strategies of the community in question. The aspirations and cultural preferences of the people also need to be taken into consideration.<sup>69</sup>

## Conclusion

Culture represents a crucial element in the essential nature of people, and is the basis of almost everything that humans do. The word 'culture', used in various forms in many languages, including English, German (Kultur) and French (La Culture), is derived from the Latin word *cultura*, which means cultivation. The term was first believed to have been used by Marcus Tullius Cicero in his work 'Tusculanae Disputationes'. Many sociologists such as Max Weber and Emile Durkheim placed culture at the centre of their studies of human behaviour. According to Emile Durkheim, individuals create societies, and as they do so, there will be "a category of facts with very distinctive characteristics: it consists ways of acting, thinking and feeling, external to the individual, and endowed with a power of coercion, by reason of which they control him". Karl Marx, on the other hand, took a less central view of culture, and instead believed that economic needs shaped culture.<sup>70</sup>

Many definitions have been provided of the term culture, and we reproduce a few general definitions that have a bearing on Anthropological Economics. Edward Burnett Tylor in his book "Primitive Culture (1871) stated, "Culture, in its broadest ethnographic sense is that complex whole which includes knowledge, belief, arts, morals, laws, customs and any capabilities or habits acquired by man as a member of society." According to a definition provided by Polish-born Anthropologist Bronislaw Malinowski, "Culture is an instrumental reality and apparatus for the satisfaction of biological and derived need. It is the integral whole consisting of implements in consumer goods, of constitutional characters of the various social groupings, of human ideas and crafts, beliefs and customs." (Malinowski, 1944) Marvin Harris on the other hand states, "A culture is the total socially acquired life-way or life-style of a group of people. It consists of the patterned, repetitive ways of thinking, feeling and acting that are characteristic of the members of a particular society or segment of society. (Harris 1975) To the cross-cultural psychologist, G. Hofstede, culture is "the collective programming of the mind, which distinguishes the members of one group humans from another. Wilson D. Wallis describes it as "the artificial objects, institutions, and modes of life or of thought which are not peculiarly individual but which characterize a group"

Therefore, it would be no exaggeration to state that the economy is a function of culture, and that economic development is a function of cultural change. Even though cultural economics is

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<sup>69</sup> Understanding the Economic and Financial Impacts of Natural Disasters, Charlotte Benson and Edward J. Clay, The World Bank

<sup>70</sup> Cultural Economics, Agust Einarsson Bifrost University, 2016

now gaining traction in academic circles due to publications by John Kenneth Galbraith, Lionel Robbins and others, the current status of economics is that it is not entirely culture-neutral. It is still steeped in Eurocentric paradigms, and vested interests may prevent major changes to the status quo. Mainstream economics, still perceives culture as an ambiguous field that cannot be studied scientifically. Even economists who consider culture as relevant, downplay its significance, and see it as auxiliary to economics.

The idea of human capital was not also always recognized by Economists. According to the Classical school of Economics represented by Adam Smith and David Ricardo, the main factors were land, labour and capital. However, Adam Smith did acknowledge that economic life could only be understood in the context of its customs and values, and culture was a determinant in economic outcomes.

As a result, economics may be shaped not only by a culture's ability to produce, but also by its willingness to produce. Therefore, most Middle Eastern nations may no longer be interested in reverting to large scale agriculture, Sub-Saharan Africa may not yet be ready for hi-tech etc. Thus, culture-specific development models taking into consideration a culture's innate tendencies and limitations, would make a difference in the lives of millions of people. Models must be bi-directional and cultural changes and changes to economic development models must go hand in hand. Therefore, Micro economic behaviour determines macro economic outcomes and macroeconomic considerations cannot be allowed to bypass sound microeconomics in the long-term. Anthropological economics therefore, seeks to put man at the centre of everything. It is an anthropocentric approach, and also takes an aeternistic or long-term view of things, and attempts a reconciliation of contradictory issues over a time-dimension with long-term considerations taking precedence over short-term considerations, all other things being equal. It however also takes into consideration the role of science and technology, the right of humans to pursue economic activities and earn their livelihood, in addition to environmental considerations, ethics and morals, and rights of other living beings. The idea of Anthropocentrism can be traced back to Maimonides, a scholar of the Torah, who lived in the 12<sup>th</sup> century, was highly anti-anthropocentric. He called man merely a drop in the bucket, and not the axle of the world, though major contributions have been made only in the past one hundred years or so, and our endeavour extends this basic idea to economics.

Economics is also a human science. Mathematical and other forms of analysis can be used, and we recommend the constant use of metrics for remediation and course-corrections. However, the human aspect must not be ignored, and fieldwork-driven results must take precedence over abstract modelling. This approach would ensure that economics is participatory and human-contact based. It would prevent helicopter economics and ivory-tower economics to boot, and avoid left of centre and right of centre dogma through fieldwork. It therefore aids in

the creation of localized and sub-localized economic models through fieldwork and can be integrated both with country-specific realities and with global macro realities.

Therefore, Anthropological economics helps achieve sustained long term growth, helps achieve macroeconomic stability in an economy, helps reduce income disparities, and helps maximize human potential and creativity by seeking to empower, and goad humans ever so gently into action. It stands in stark contrast to socialistic ideals which multiply inefficiency and sloth, and lead to slow economic and intellectual growth. It can be used both in a macro-economic sense, a micro-economic sense, and can even be used in the corporate sector.

There is no agreement yet as to whether economics is to be construed as a full-fledged science. A science is a systematized body of knowledge that can be ratified through observation and experimentation. It is a body of generalizations, principles, theories and laws where there is a causal relationship between cause and effect. Thus, science is a systematized body of knowledge with its own laws, theories which have universal validity. These are more or less true of economics. Economics is a science because many of its laws have universal validity, and this has been proven through time. Examples of laws in Economics include the law of diminishing returns, the law of diminishing marginal utility, the law of demand, and Gresham's law etc. Economics is also a science because of its self-corrective nature, and its amenability to revision in the light of changing circumstances. Thus, economic theories are constantly revised from time to time. This holds true in diverse fields such as macroeconomics, microeconomics, monetary economics, international economics, and public finance. Economics may also make use of inductive and deductive methods in different cases, and these are well-established in science. The inductive approach in Economics for example, was used by the Historical School in Germany, and the Engel's Law of family expenditure and the Malthusian theory of population were derived from inductive reasoning. According to Friedman and others, it does not always matter whether the assumptions of economic theory are realistic or not, but whether a theory has predictive power that can hold good over time and space. Some even go to the extent of saying that theories can have unrealistic assumptions, if they can be ratified over time. This is called the F-twist, but has been criticized by Prof. Nagel, Prof Gordon and others.

However, not all economics concur if all these can be applied to economics. For example, science requires testing of facts through experimentation. There is relatively less scope for testing in economics, because it deals with humans and human activities. Humans may not always behave rationally, and accurate data may often be hard to get. Thus, economic laws may not be as precise as the laws of gravitation. Thus, social and cultural factors often enter the picture, and these may be complex and difficult to measure. Most Economic laws are behaviourist, examples being the Law of Diminishing Marginal Utility, the Law of Equimarginal Utility, and the law of demand. They are also usually only indicative, and almost never assertive,

and cannot make a point forcefully. According to Alfred Marshall, "Rather than with the simple and exact law of gravitation, the laws of men are so vicious and uncertain, that the best statement of tendencies that we can make in a science of human conduct is inexact and faulty." Schumpeter likewise states, "Economic laws are much less stable than any laws of physical sciences, and they work out differently under different institutional conditions." However, Anthropological economics, with its emphasis on fieldwork-driven data collection, fieldwork-driven planning, fieldwork-driven ratification, and fieldwork-driven remediation and culture-based analysis of issues, can take objectivity to a much higher level, and bring Economics closer to being a full-fledged science. It would also help us avoid the perils and pitfalls associated with over-theorization and careerism. One of the pillars of Anthropological Economics would be the constant learning from experience. Additionally, inductive and nomothetic approaches may also be followed in Anthropological Economics with carefully-crafted generalizations and culture-specific exceptions. Accurate predictions are also not possible in some other sciences like Biology and Meteorology. Does that mean that they should not be considered sciences? We therefore believe that methods and approaches used in Anthropological Economics have the potential to take Economics along its path towards a full-fledged science. Furthermore, Economists have always made use of the measuring rod of money, and hypotheses in other fields of social sciences like psychology have proven to be even less reliable. Anthropological Economics could only help reinforce Economics as a full-fledged science.

It is not to say that the benefits of Anthropological Economics will be felt only by people in developing countries. This approach can be of great use in the developed world too, where ethnic and social differences persist. Furthermore, developed countries now need to reorient themselves to meet the challenges generated by developing countries, and this approach can help them do that. We also propose the idea of 'Anthropological constancy' which states ideas based on sound anthropological concepts will have universal or near-universal validity across space and time, keeping in mind the scope of anthropology which studies everything pertaining to human endeavour. This approach will almost therefore certainly raise the standards of scholarly endeavour to a much higher level, with attendant benefits across the intellectual spectrum, and rich rewards for human health, wealth, happiness and the overall experience of human life.